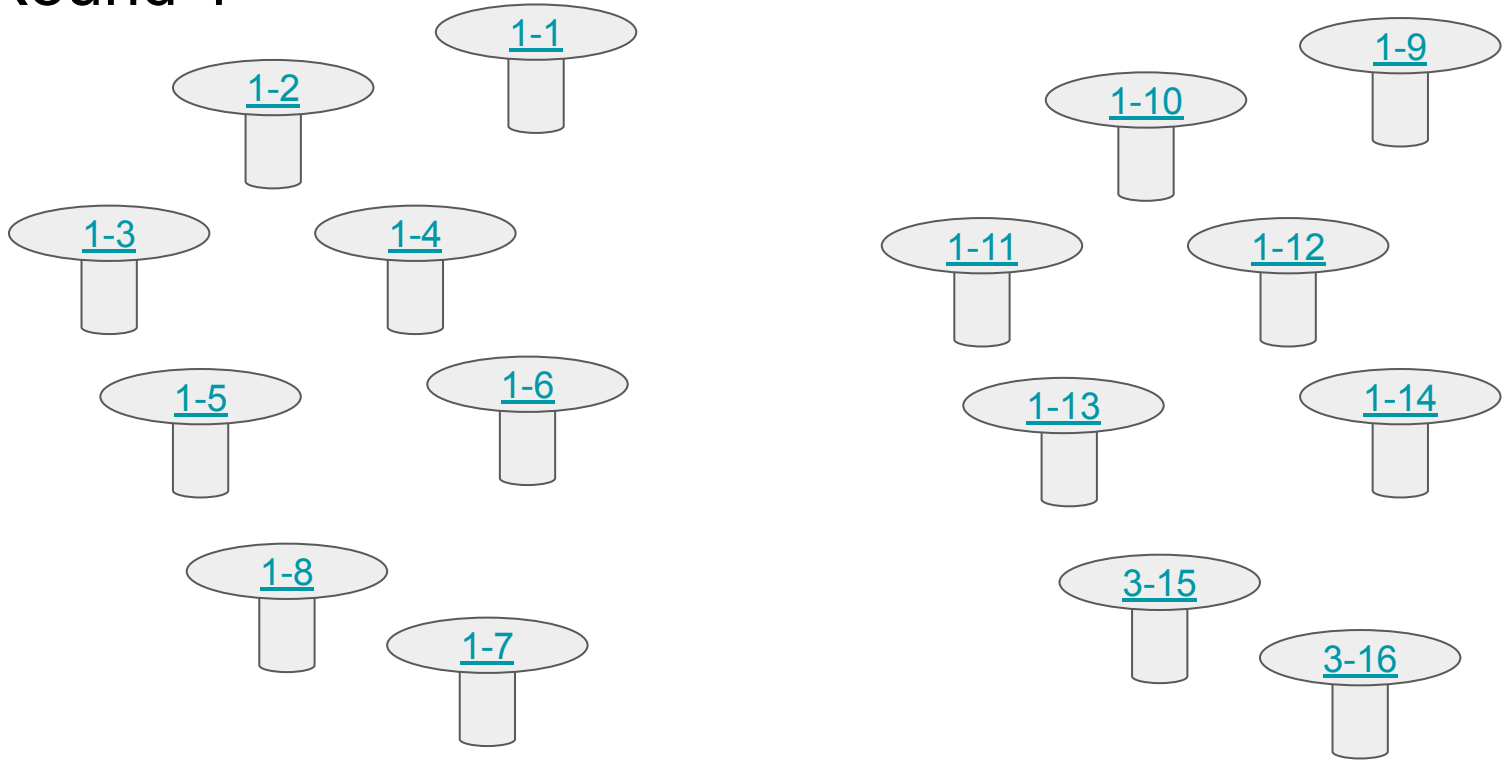inf313

introduction to computational reasoning

Automation Class One

Deck 2

Links

[Miro board for feedback question](#)
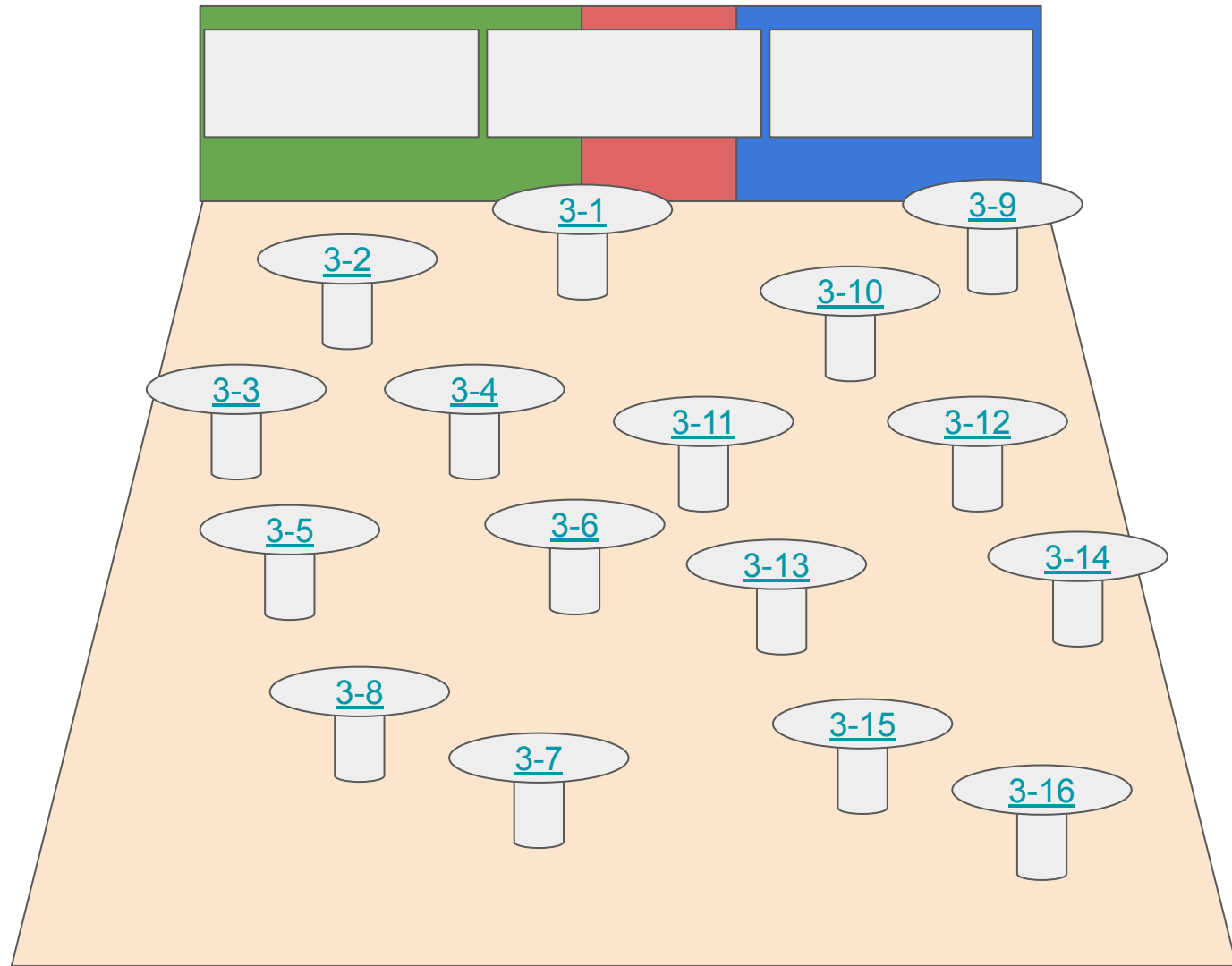
Tables Round 1

Tables Round 2

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

2-2

2-1

2-16

2-15

2-3

2-4

2-14

2-13

2-5
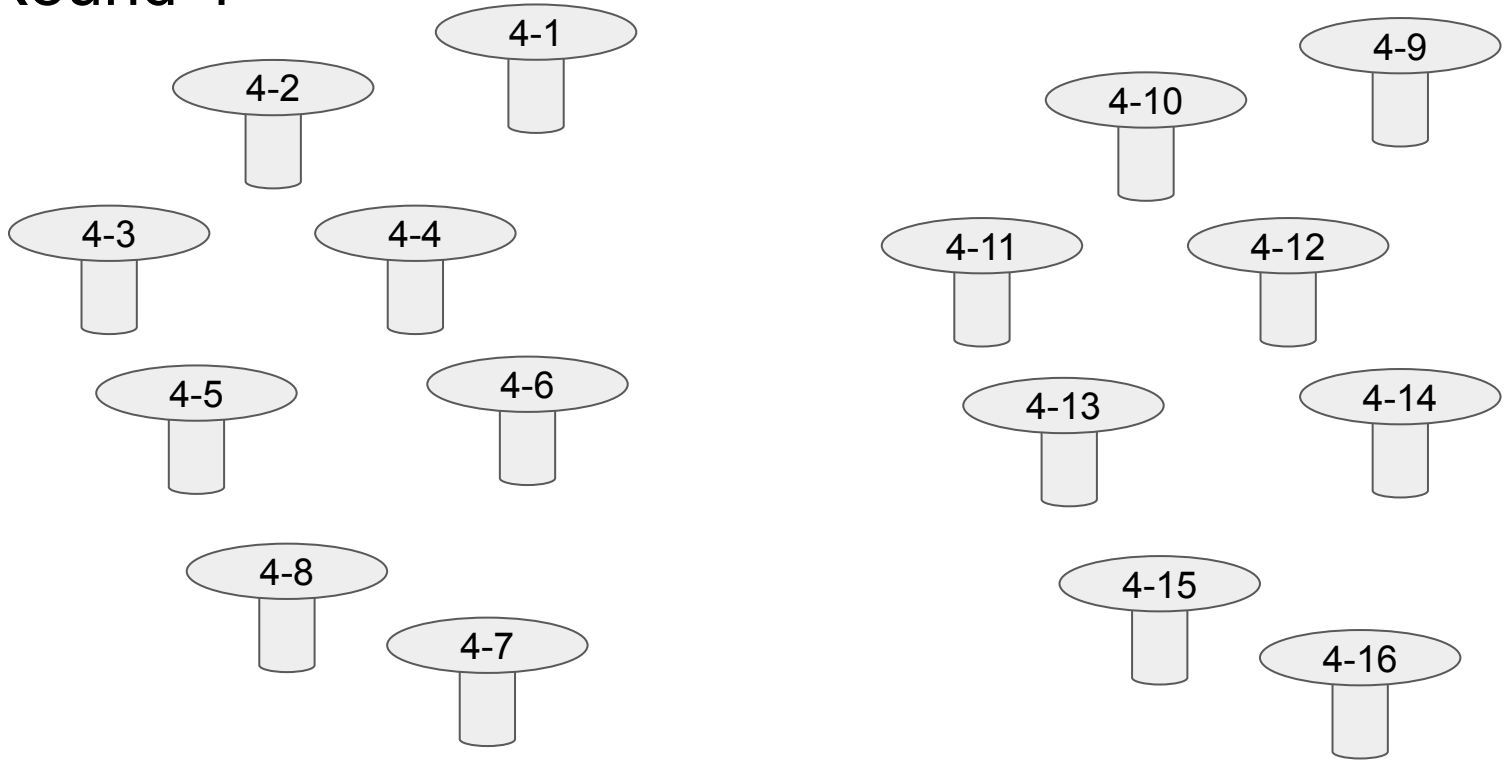
2-6

2-11

2-12

2-7

2-8

2-9

2-10
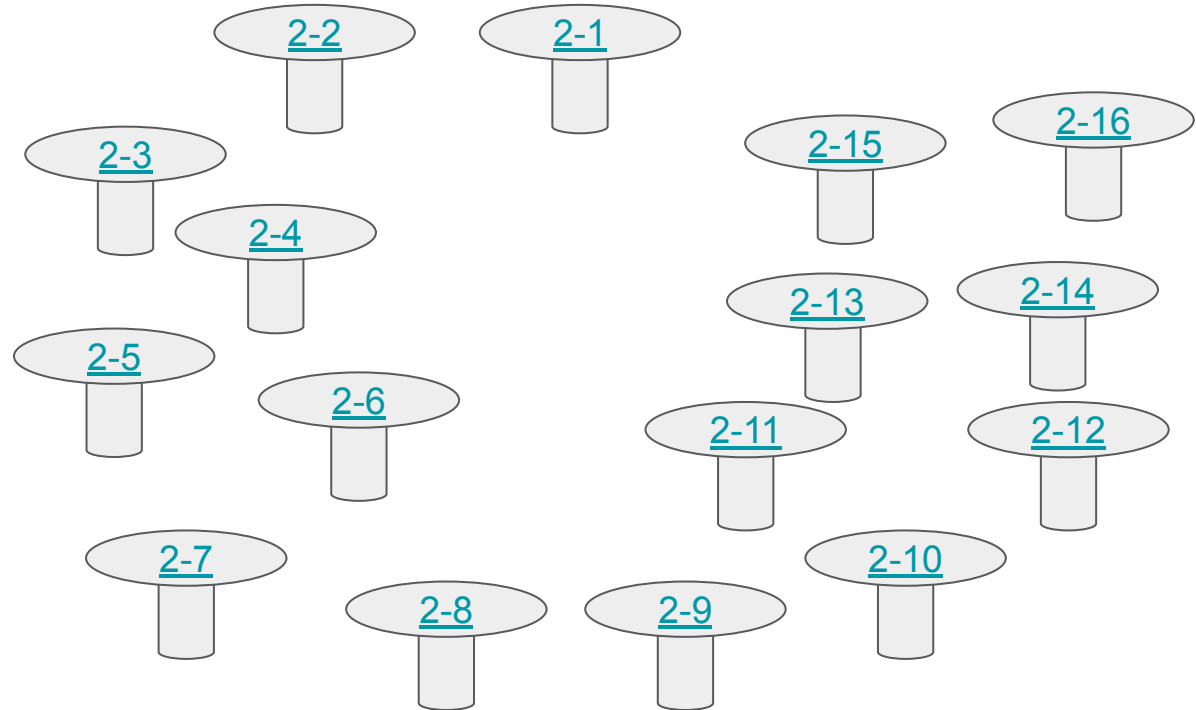
Tables Round 3

For this exercise we'll go write to tables in pairs of two. After we go into breakout rooms I'll send a broadcast chat about a situation that you can draw a causal loop diagram for.

3-1
3-2
3-9
3-10
3-3
3-4
3-11
3-12
3-5
3-6
3-13
3-14
3-8
3-15
3-7
3-16

Tables Round 4

People

Athalia

Benner

Bo

Christina

Chyna

Cindy

Eden

Elizabeth

Fiza

Hyemin

Hajir

Julia

Luckyna

Marco

Nicholas

Oliver

Reese

Samita

Shae-Linn

Tiago

Waanmathi
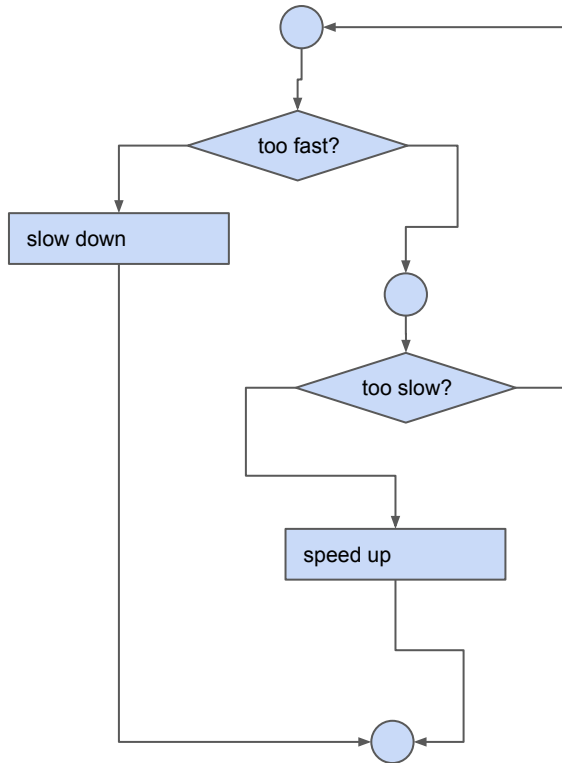
Yahui

Yandrickx

Yuxuan

Zhiqi

Zoie

Table 1-1

Table 1-2

Table 1-3

-

Table 1-4

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

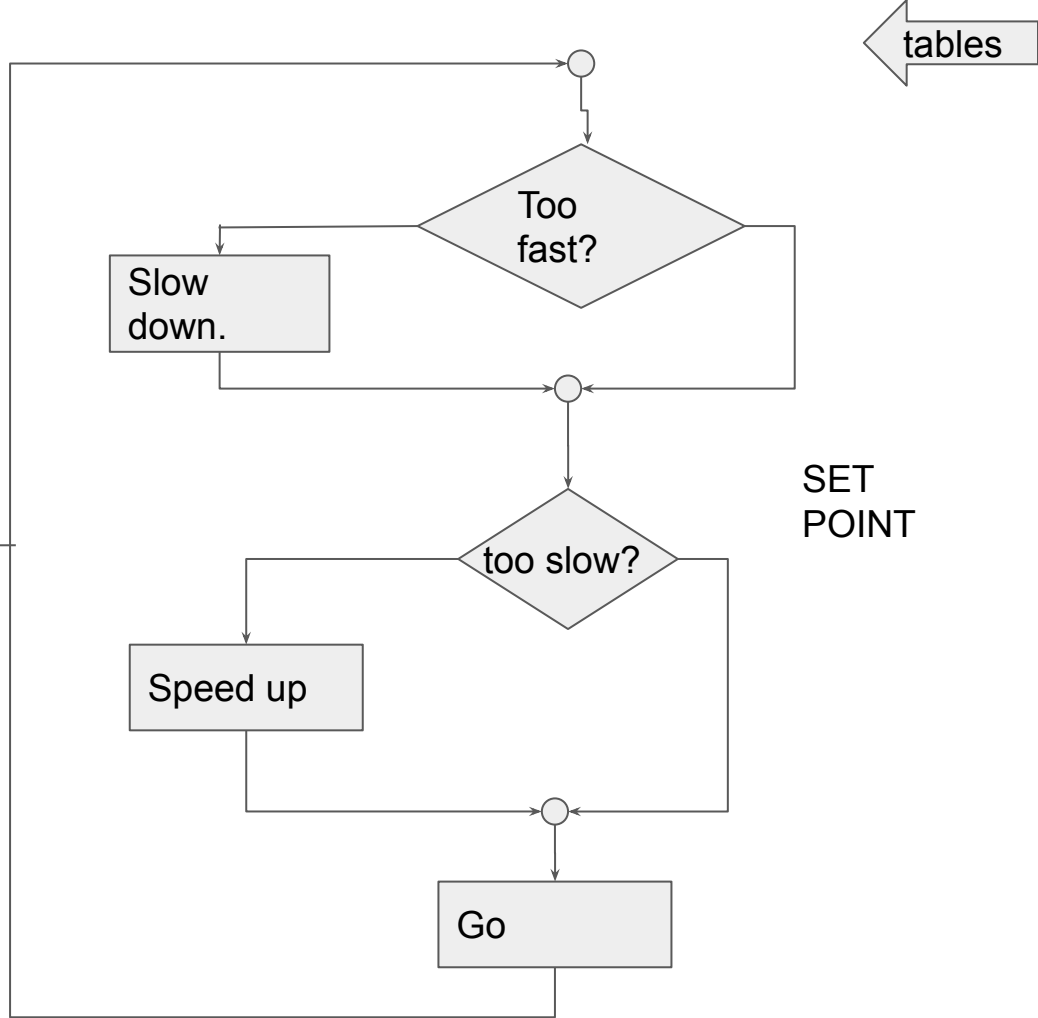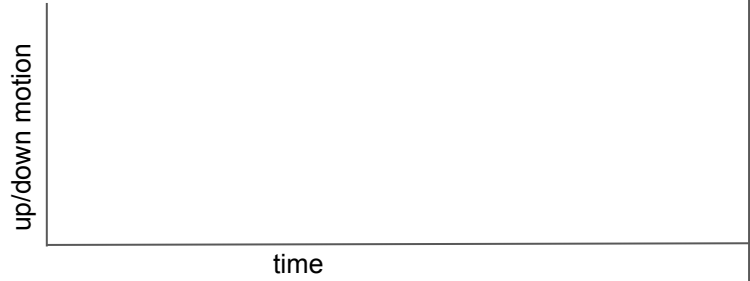# Table 1-5

Table 1-6

-

Table 1-7

up/down motion

time

Too fast?

Slow down.

SET POINT

too slow?

Speed up

Go

Table 1-8

Table 1-9

Table 1-10

1.

Table 1-11

Table 1-12

Table 1-13

Table 1-14

Table 1-15

Table 1-16

Table 2-1

Kubernetes

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

1. Comedian telling jokes in front of a live audience.
   - Closed loop (the comedian knows how well they're doing based on if audience's reactions)
2. Electric hand-held hair dryer.
   - Open-loop ; it keeps on blowing until it breaks or you turn it off
3. Playing the game "hotter and colder"
   - Closed loop: you get verbal feedback of whether you are "hotter" or "colder"
4. Timer based clothes dryer
   - Open-loop; it doesn't detect how 'dry' the clothes are. It just keeps going until the timer runs out.

Table 2-2

Comedian - closed loop (if following a set and would stop the show if he was getting negative response/ "boos" from audience - or, open if the comedian continues no matter what)

Hair dryer - open (hair dryer doesn't check to see whether your hair is dry or not)

Hotter and colder - closed, requires feedback from player and "knower"

Timer based clothes dryer - open, because time-based

Table 2-3

Table 2-4

-

Table 2-5

.

Table 2-6

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience. - depends on if the audience laughs?
- Electric hand-held hair dryer. -
- Playing the game "hotter and colder" - closed
- Timer based clothes dryer - open

Table 2-7

Table 2-8

-

Table 2-9

- Comedian telling jokes in front of a live audience - closed loop (audience reaction is the feedback)
- Electric hand-held hair dryer - open
- Playing the game "hotter and colder" - closed (response of the other participants)
- Timer based clothes dryer - open

Table 2-10

Comedian telling jokes **closed loop**, the laughter lets comedian know if hes doing good

Electric hand dryer closed loop, the dryer goes on when it senses motion plus over heating

Hot or cold game closed loop, if its hot then you go closer

Timer based dryer open look, the dryer stops at timer doesn't matter if clothes are already done

Table 2-11

Table 2-12

Table 2-13

Table 2-14

Table 2-15

Table 2-16

Table 3-1

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO_2 gets released. The more CO_2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-2

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."
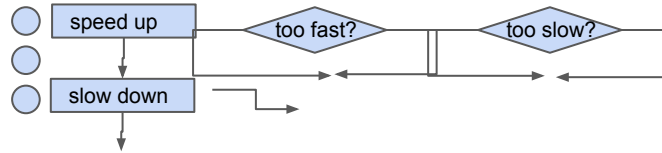
"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-3

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Luckyna

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer
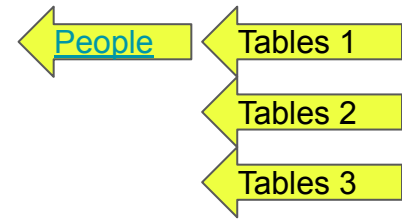
6 Verbal instructions directly on tables page

Table 3-4

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-5

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-6

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-7

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-8

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO_2 gets released. The more CO_2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-9

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-10

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO_2 gets released. The more CO_2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-11

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-12

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-13

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."
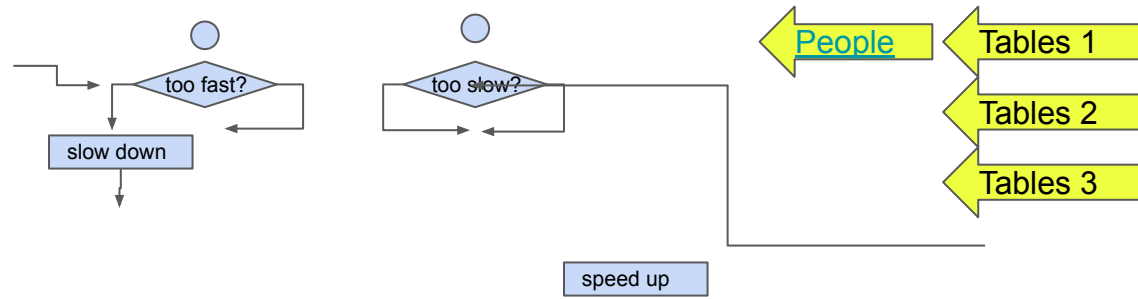
"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-14

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-15

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.

Table 3-16

"When things go well, I get over confident and start to cut corners. Things start slipping and I get careful and then things go better."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

"The hotter I am, the more I sweat. The more I sweat, the cooler I get. The colder I am the more I shiver. The more I shiver, the warmer I get."

The warmer the earth is, the more thawing and melting. The more things thaw and melt, the more CO2 gets released. The more CO2 in the atmosphere, the more sunlight gets reflected back. The more reflected sunlight, the warmer the earth.
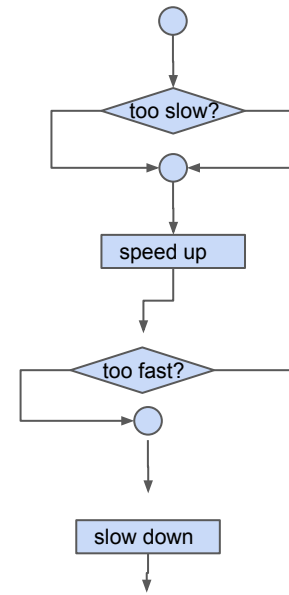
Athalia

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
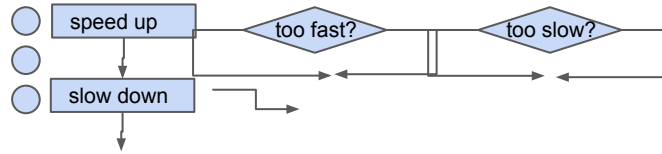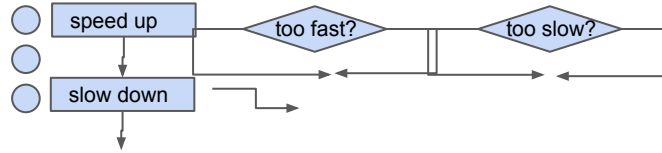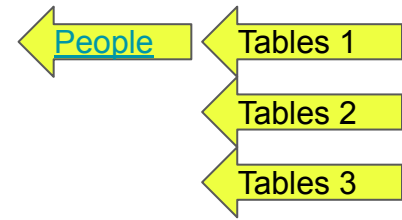
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

too fast?

slow down

too slow?

speed up

People

Tables 1

Tables 2

Tables 3

- Comedian telling jokes in front of a live audience - closed loop (audience reaction is the feedback)
- Electric hand-held hair dryer - open
- Playing the game "hotter and colder" - closed (response of the
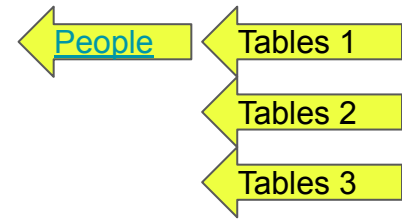- Timer based clothes dryer - open

Benner

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.
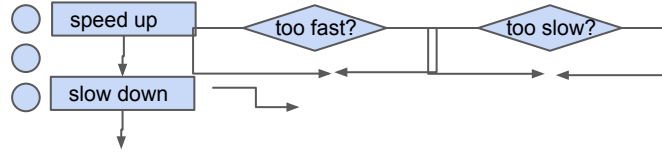
5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
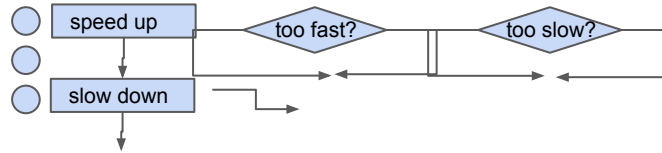
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

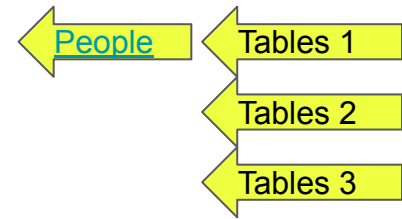6 Verbal instructions directly on tables page

Bo

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

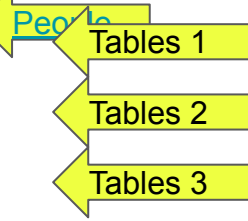6 Verbal instructions directly on tables page

too slow?

speed up

too fast?

slow down
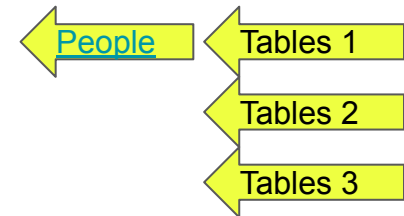
Christina

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer
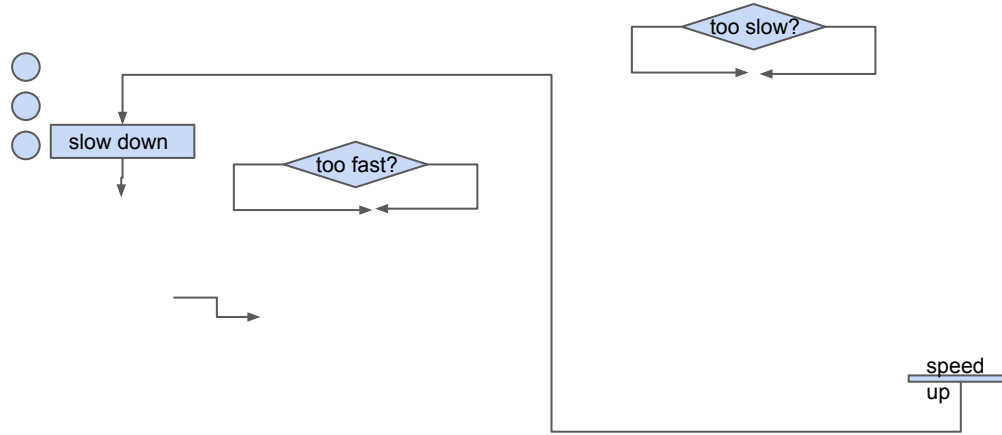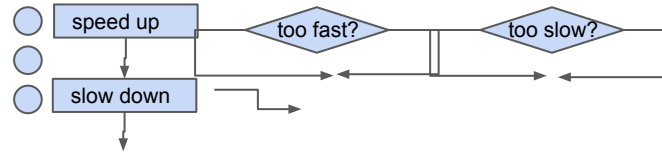
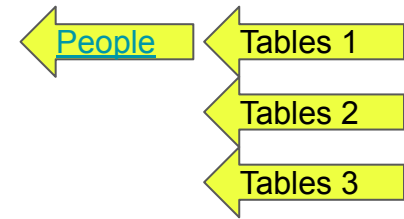6 Verbal instructions directly on tables page

Chyna

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

Cindy

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
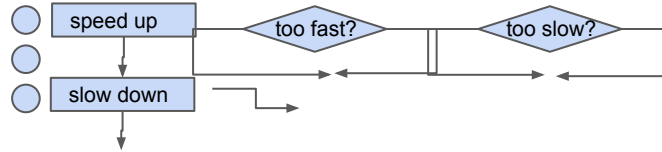
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer
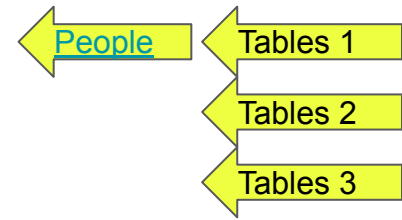
6 Verbal instructions directly on tables page

Eden

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
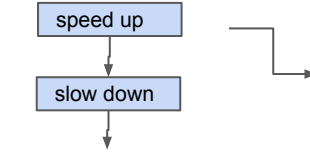
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

too slow?

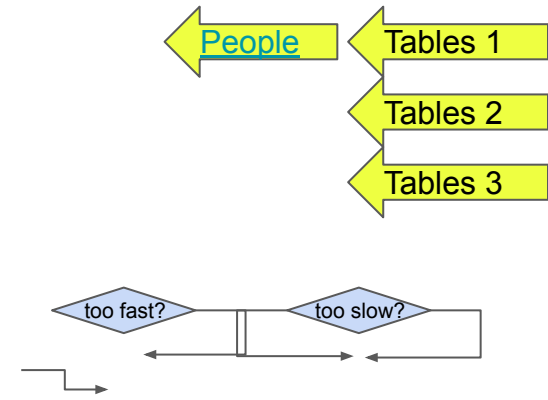slow down

too fast?

speed up

Elizabeth

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

speed up   too fast?   too slow?

slow down

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
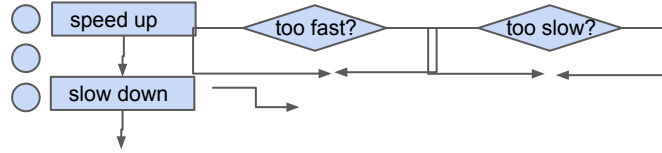
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

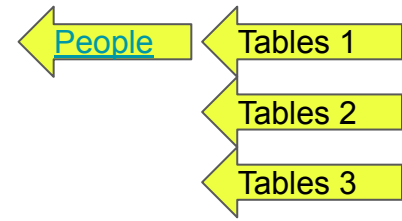6 Verbal instructions directly on tables page

Fiza

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
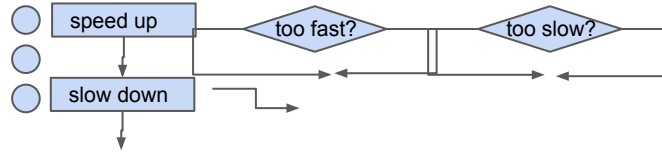
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

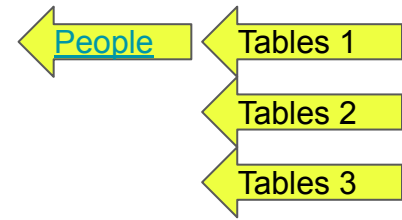6 Verbal instructions directly on tables page

Min

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
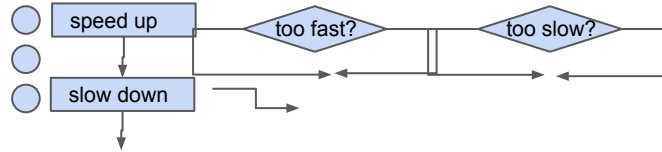
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

Tables 1

Tables 2

Tables 3

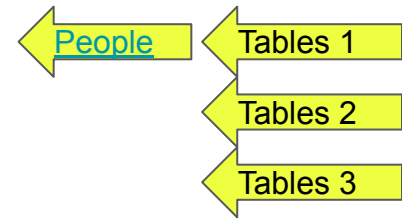speed up

slow down

too fast?

too slow?

Hajir

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

speed up | too fast? | too slow?
slow down

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
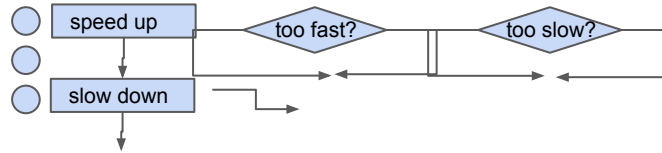
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

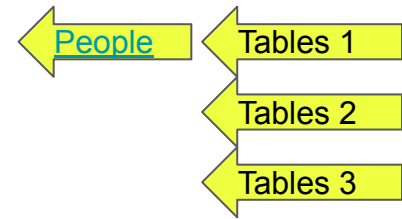6 Verbal instructions directly on tables page

Julia

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
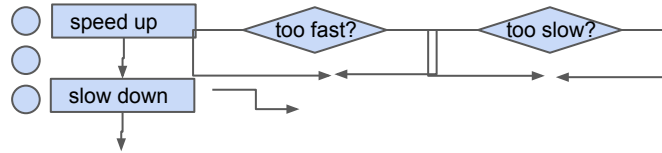
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

Marco

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page
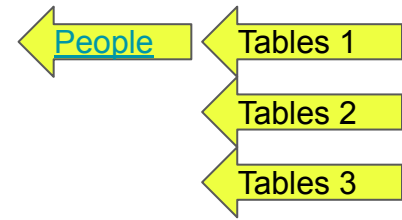
Nicholas

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

speed up   too fast?   too slow?

slow down

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
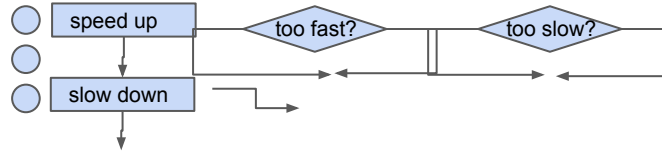
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

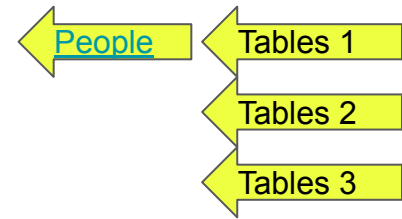6 Verbal instructions directly on tables page

Oliver

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

| speed up | | too fast? | | too slow? |
| slow down |

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
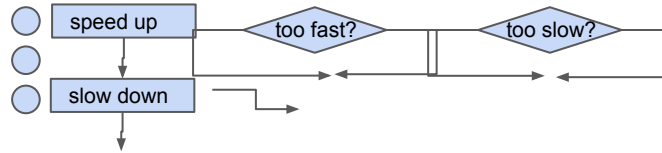
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

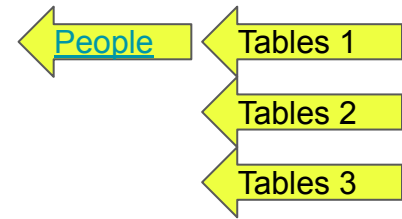6 Verbal instructions directly on tables page

Reese

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

| speed up | | too fast? | | too slow? |
| slow down | | | | |

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
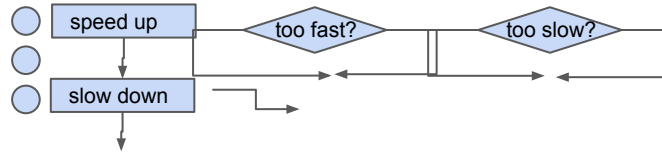
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page
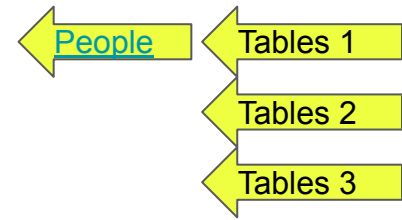
Samita

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
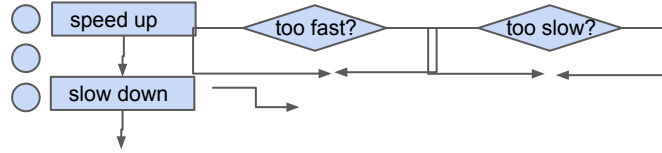
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

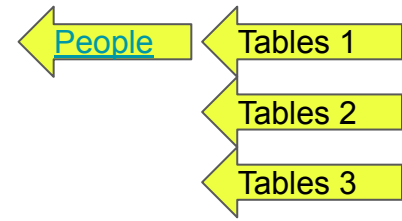6 Verbal instructions directly on tables page

Shae-Linn

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
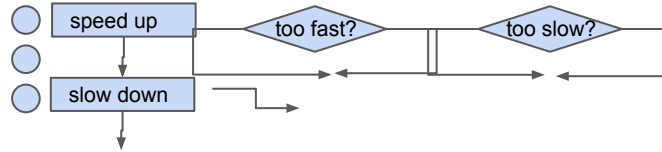
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

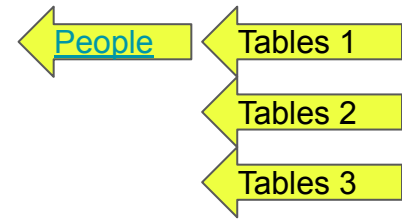6 Verbal instructions directly on tables page

Tiago

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
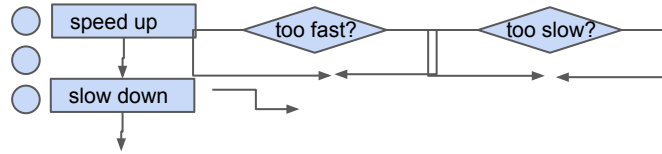
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

Waanmathi

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer
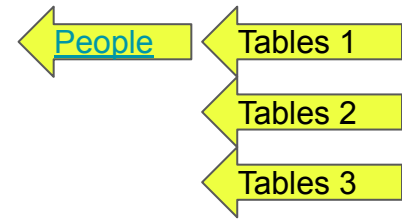
6 Verbal instructions directly on tables page

Yahui

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
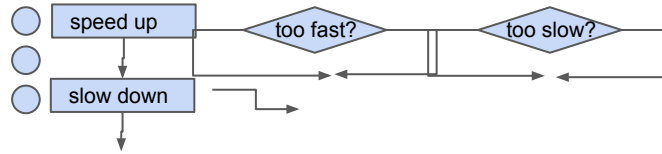
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page
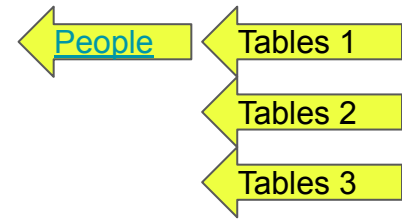
Yandrickx

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

speed up   too fast?   too slow?

slow down

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
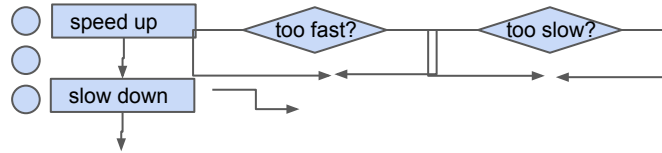
● Comedian telling jokes in front of a live audience.
● Electric hand-held hair dryer.
● Playing the game "hotter and colder"
● Timer based clothes dryer

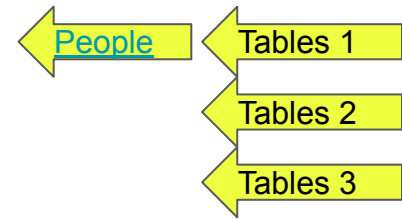6 Verbal instructions directly on tables page

Yuxuan

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

speed up   too fast?   too slow?

slow down

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
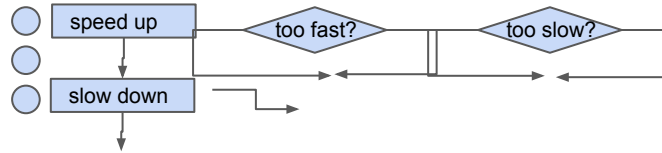
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

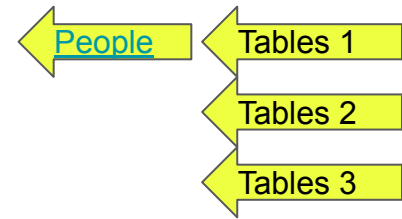6 Verbal instructions directly on tables page

Zhiqi

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?
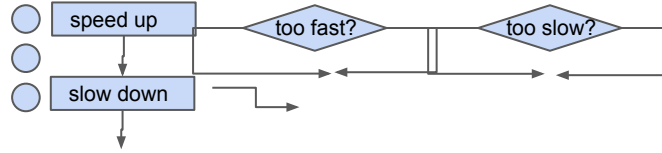
- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page

Zoie

4. [auto04] The centrifugal governor slows a machine down if it is going too fast and speeds it up if it is going too slow (compared to a chosen speed). What does this look like in a flow chart? Arrange these items to capture this logic.

5. [auto04] Consider these four "systems" - are they "open" or "closed" loops? If they are closed loop, what's the feedback and how does the system use it?

- Comedian telling jokes in front of a live audience.
- Electric hand-held hair dryer.
- Playing the game "hotter and colder"
- Timer based clothes dryer

6 Verbal instructions directly on tables page