

Write the `if` part

```
34  # Library imports
35  from vex import *
36
37  # Begin project code
38  # When the program starts.
39  # The robot moves forward if the Bumper Switch is held down.
40  # Otherwise, nothing happens.
41  if bumper_b.pressing():
42      left_motor.spin(FORWARD)
43      right_motor.spin(FORWARD)
```

Type in `if` , add the condition that the program should check for, and then add a colon `:` to indicate the start of the code block that will be executed if the condition is True.

NOTE: In this example, the condition is that the Bumper Switch is being pressed.

Start a new line below the `if` statement and increase the indentation level, add command(s) with the same indentation level for the robot to carry out *if* that condition is met.

NOTE: In this example, the commands are to spin both motors forward.

NOTE: Use `#` notation to include comments that explain what that section of code does. In this example, the comments explain the robot's two conditions: 1)The Bumper Switch is pressed and the motors spin the robot forward or 2) nothing happens.

Code that can be copied and pasted:

```
# Library imports

from vex import *

# Begin project code
# When the program starts.
# The robot moves forward if the Bumper Switch is held down.
# Otherwise, nothing happens.
if bumper_b.pressing():
    left_motor.spin(FORWARD)
    right_motor.spin(FORWARD)
```

Add a forever loop in programs that should check conditions repeatedly

```
34  # Library imports
35  from vex import *
36
37  # Begin project code
38  # The robot continually checks if the Bumper Switch is pressed
39  # and runs the robot forward.
40  # However, it will never stop spinning the motors.
41  while True:
42      if bumper_b.pressing():
43          left_motor.spin(FORWARD)
44          right_motor.spin(FORWARD)
```

Add a `while True :` loop statement above the `if` statement of the program, increase the indentation level of the `if` statement and the command(s) for the robot to carry out *if* that condition is met. It will have the program check if the condition is true continuously.

NOTE: If the program should only check the condition once, then a loop is not necessary.

NOTE: This example requires a loop because the robot should check if the Bumper Switch is pressed at any time. See [How to Program with a While Loop in VEXcode V5 Python](#) for more information.

NOTE: Use `#` notation to include comments that explain what that section of code does. In this example, the comments explain:

1. The robot will continually check if the Bumper Switch is pressed and spin the robot's motors forward if it is.
2. The robot will not stop moving forward once started.

Code that can be copied and pasted:

```
# Library imports
from vex import *

# Begin project code
# The robot continually checks if the Bumper Switch is pressed
# and runs the robot forward.
# However, it will never stop spinning the motors.
while True:
    if bumper_b.pressing():
        left_motor.spin(FORWARD)
        right_motor.spin(FORWARD)
```

Finish the `else` part

```
34 # Library imports
35 from vex import *
36
37 # Begin project code
38 # The robot continually checks if the Bumper Switch is pressed
39 # and runs the robot forward.
40 # Otherwise, nothing happens.
41 while True:
42     if bumper_b.pressing():
43         left_motor.spin(FORWARD)
44         right_motor.spin(FORWARD)
45     else:
46         left_motor.stop()
47         right_motor.stop()
```

Type in `else:` below the block of code that is executed when the *if* condition is met, and adjust the indentation level of the `else:` statement to match that of the `if` statement.

After the `else` statement's colon `:`, start a new line and increase the indentation level, add command(s) with the same indentation level for the robot to carry out whenever the condition is *not* met.

NOTE: In this example, the motors stop when the Bumper Switch is *not* pressed.

NOTE: If the program does not need to do something 'else', an `if` statement can be used without the `else`.

Code that can be copied and pasted:

```
# Library imports
from vex import *

# Begin project code
# The robot continually checks if the Bumper Switch is pressed
# and runs the robot forward.
# However, it will never stop spinning the motors.
while True:
    if bumper_b.pressing():
        left_motor.spin(FORWARD)
        right_motor.spin(FORWARD)
    else:
        left_motor.stop()
        right_motor.stop()
```