Inputs With Variables + Reading The Values

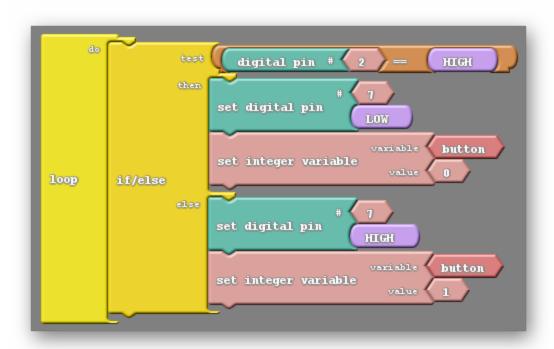
Revision 1.01

Getting The Input Value Into A Variable

A variable is like a bucket that stores information. A variable has a name, which is the name of the bucket, and it also has a value, which is the stuff that is inside the bucket.

The program below creates a variable named "button", and it sets it the value "1" if the button is pushed, and "0" if the button is not pushed.

Study the program below to make sure that you understand how it works.



Displaying The Variable On The Serial Monitor

Now we will display our variable to the screen. We do this by using the "serial println" block.

```
loop

test digital pin # 2 = HIGH

set digital pin | LOW

set integer variable value | 0 |

set digital pin | HIGH

set integer variable value | 1 |

set integer variable value
```

Once you download the code, click on "Serial Monitor" on ArduBlock and see the data display!

Customizing Your Message

Now we will modify the message so that it says "the button status is: _____". Try the program below!

```
test digital pin # 2 — HIGH

then set digital pin # 7

set digital pin # 1

set integer variable value 0

set integer variable value 1

set integer variable value 1

set integer variable value 1

set integer variable value 1
```

Challenges

Now that you know how to store input values and display them, try the following challenges!

- 1. Display your robot's name on the screen
- 2. Display on the screen whether the light is on or off. Display "YES" for on and "NO" for off. If programmed correctly, the message should change whenever you push the button.