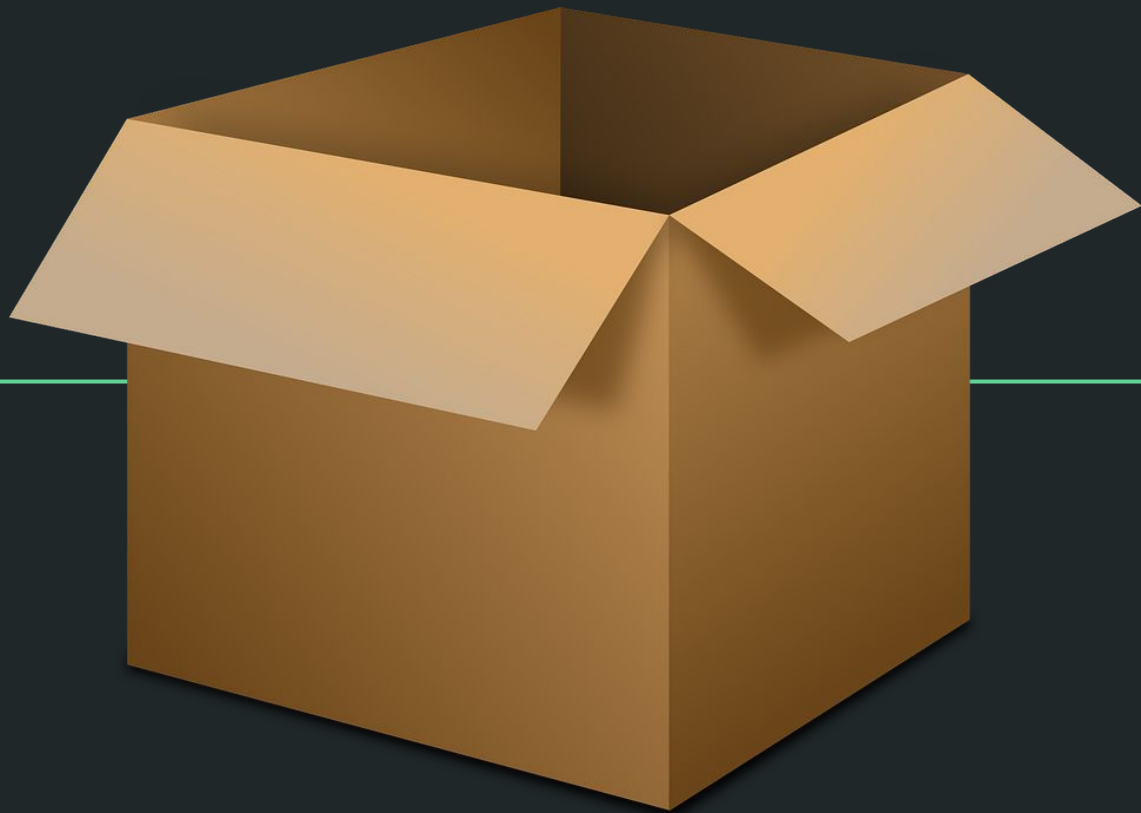# Programming Robots

Variables

You store information inside variables

Such as:

- Integers
- Characters
- Strings (if you don't know what this means, it means more than one character)
- Boolean Values (true or false)
- Other types of numbers!
- That's about it, really

How to make variables

(type of variable) (variable name) = (variable value);

Ex. int rotation = 30;

Then you can call the variable, and get the value assigned!

Ex. The computer would view 3 * rotation as 90

Boolean Conditions

Boolean Conditions are True or False

Boolean Conditions are a statement that is either true or false

Ex. 30 >= 15 is returns true, and 30 >= 45 returns false

They can be either a Boolean variable or a line using Boolean Operators

Boolean Operators

== : equals

< : less than

> : greater than

<= : less than or equal to

>= : greater than or equal to

&& : and

|| : or

If, While, and For

The If/Else

Ex.

if(x > 15){

something

}

Else{

Some other thing

}

(You can also throw in an else if somewhere)

The While Loop

Ex.

while(x < 2){

     Repeat this

}

The For Loop (Complicated)

Ex.

for(int x = 0; x < 15;x++){

　　Do this once, then add 1 to x, then repeat if x is less than 15

}

(you do need those semicolons)