INTRODUCTION TO *JAVASCRIPT* FUNCTIONS

FUNCTIONS

Generally speaking, a function is a "subprogram" that can be called by code outside of the function. A function is composed of a sequence of statements, just like any other program.

Values can be *passed* to a function as input, while the function can also *return* values as output.

To call a function, simply type the name of the function in your text editor followed by a pair of brackets. The values that we want to pass to the function are listed inside these brackets. A standard function call with two inputs and no output looks like so:
FunctionName(input1, input 2);

If you want to read more about JavaScript functions in more detail, check out this resource created by Mozilla:
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Functions

In this Project, all of the functions that we need to solve our problem have been defined for us. These two functions are MoveArm() **and** MagneticSwitch()**.**

We can call as many functions as we like, and they will run in order from top-to-bottom, but don't forget to add a semicolon (;) at the end of each line.

MoveArm(X, Y, Z)

The MoveArm() **function tells MagneBot to move the center of it's magnetic sphere to the target X, Y, Z coordinates.**

This function has three decimal inputs: X, Y and Z. You need to make sure that you include a commor between these three inputs.

MagneBot will automatically calculate the shortest path to reach the new coordinates - this will sometimes cause problems!

If MagneBot is unable to reach the target coordinates, it will ignore that MoveArm() **function call and your code will continue.**

MagneticSwitch(bool)

The MagneticSwitch() **function toggles the magnetic sphere at the end of the robotic arm on and off. You can utilise this functionality to both pick up and drop magnetic objects.**

This function has one boolean input. A boolean can only have values of either true **or** false**. You will need to replace the text bool with either** true **or** false **whenever you call the** MagneticSwitch() **function.**