Text

Description automatically generated with low confidence

**Functions**

https://makecode.microbit.org

We want to combine the driving and stopping functionality. This can make the program a bit large and hard to understand. Use functions to define chuncks of functionality that can be combined by **calling** these functions.

If you’ve done the ultrasonic and line sensor units, lets combine the results using functions.

* You may want to start by **duplicating** any working code you have.

 Click on the **Advanced** button to expose more options.

Click **Functions**

Click **Make a Function…**

An Edit Function window pops up, but we can click **Done** and continue to edit the function.

We will create a “drive” function that uses the line tracking sensors to steer.

A picture containing diagram

Description automatically generated

Change the name of the function to “**drive**”

Add the code you have for driving the robot.  
(see over the page for an example)

Graphical user interface, timeline

Description automatically generated with medium confidence

The outer **forever** loop will read the ultrasonic sensor and then decide **if** it should stop, or **if** it should drive.

Add if/else **logic** that stops **if** the distance is **less than** some value, **else** it calls the drive function.

Graphical user interface, application, chat or text message

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*Try turning other blocks of functionality into functions, like honking the horn.*