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 chunks of functionality that can be combined by* ***calling*** *these functions.*

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

1. You may want to start by **duplicating** any working code you have, so you have a backup.
2.  Click on the **Advanced** button to expose more options.
3. Click **Functions**
4. Click **Make a Function…**

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

1. Create a “drive” function that uses the line tracking sensors to steer.

A picture containing diagram

Description automatically generated

1. 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

1. The outer **forever** loop reads the ultrasonic sensor and decides **if** it should stop, or **if** it should drive.
2. 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

Description automatically generated

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