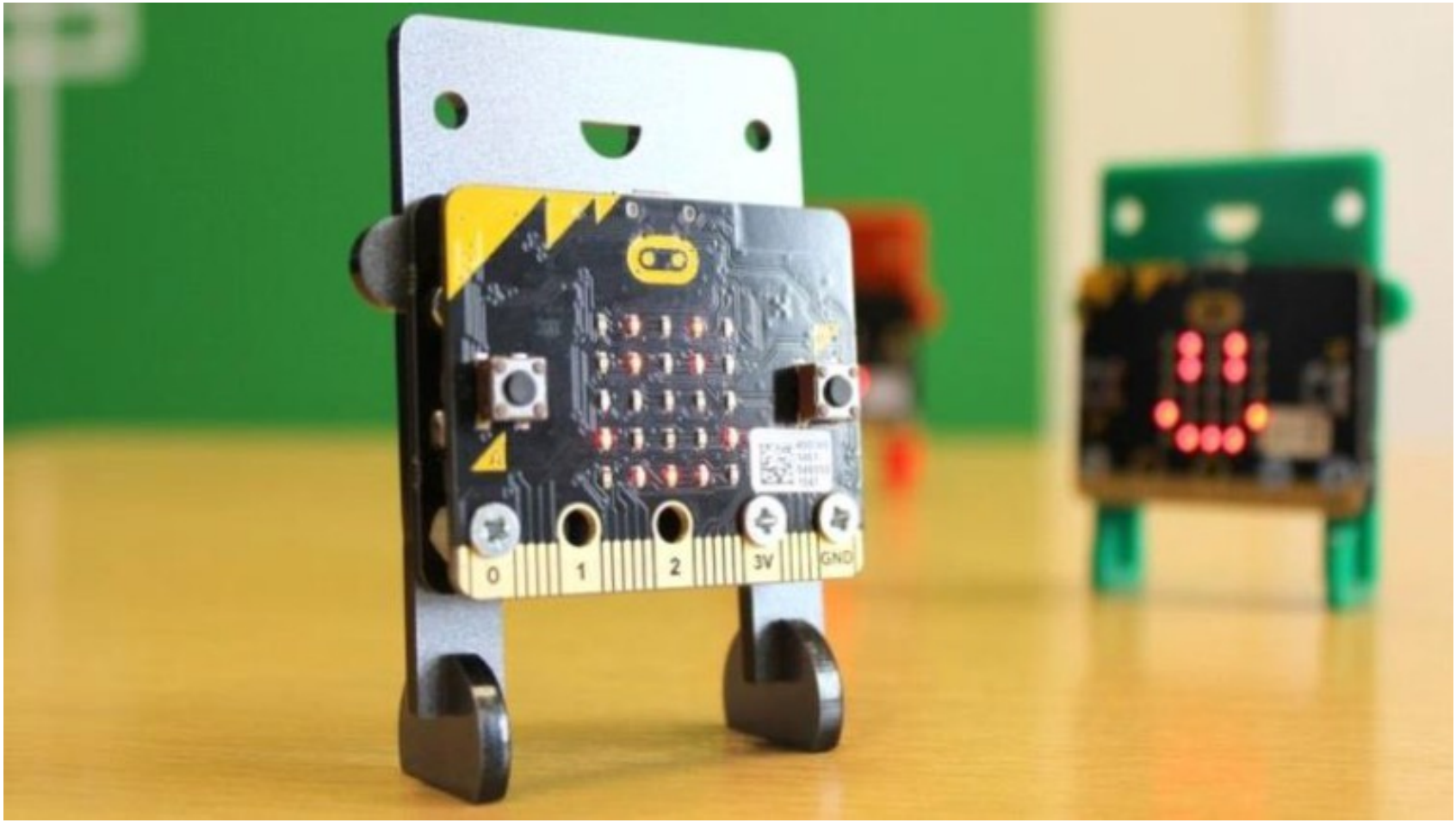


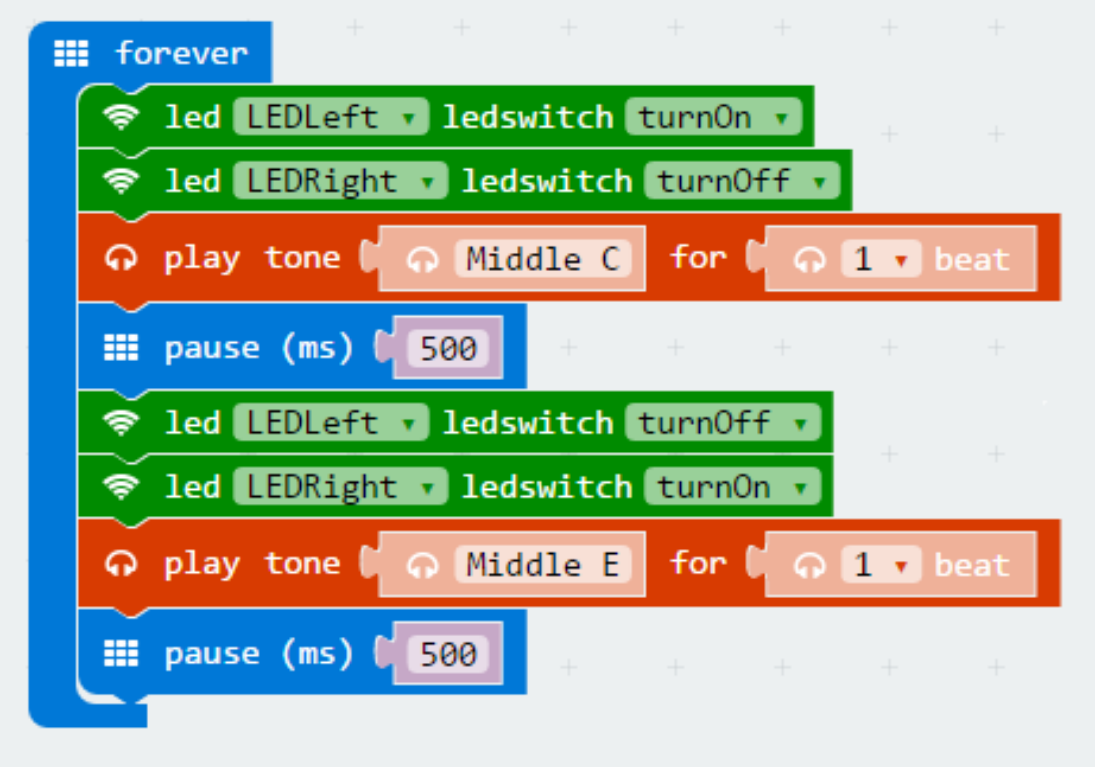
Introduction to Programming and Computer Science/Electronics

Lesson 6

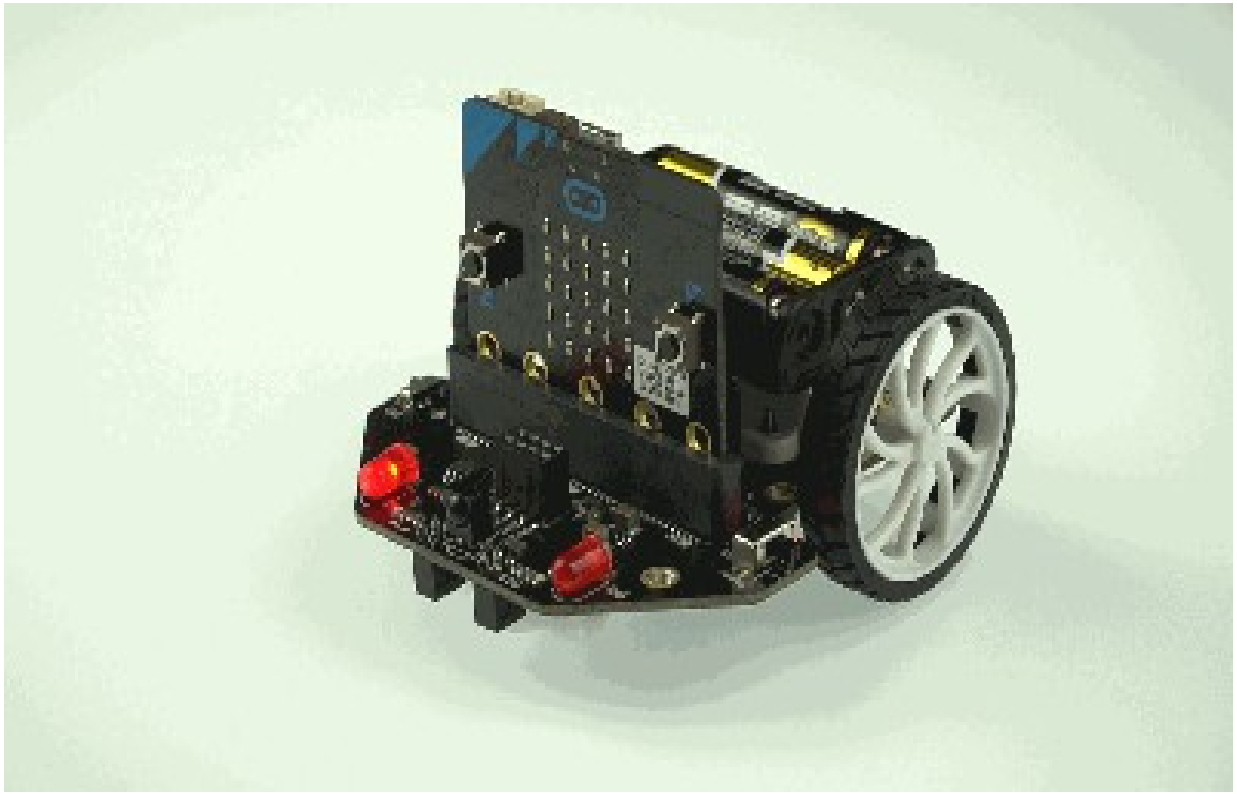
LED Light Flash and Buzzer Sound

- Learning to control LED Light and Buzzer Sound
- Objective: Program Macqueen to perform the following
  - LED Light Flash - alternate
  - Buzzer
    - Outputs 2 different tones
- Intervals of 500 ms

LED Light Flash and Buzzer Sound Code



LED Light Flash and Buzzer Sound



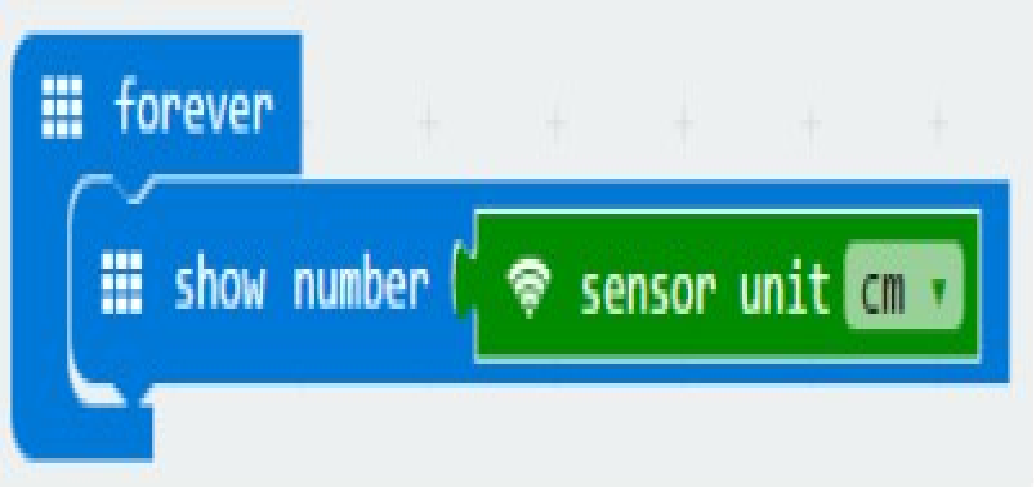
Exercise

- Try this!
- Objective: Program Macqueen to perform the following
  - LED Lights Flash - Alternate
  - Buzzer
    - Play your favourite song/melody

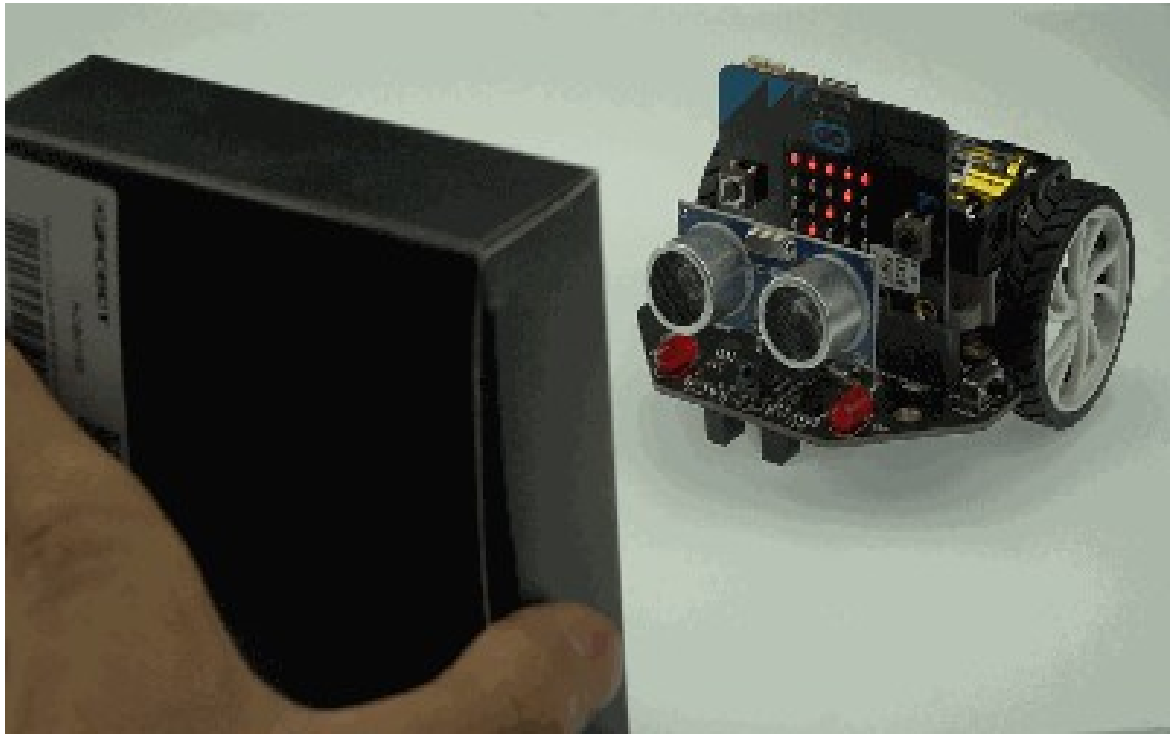
Read Ultrasonic Distance Project

- Read Ultrasonic Distance
- Objective: Program Macqueen to perform the following
  - Detect distance between itself and an object in front

Read Ultrasonic Distance Code



Read Ultrasonic Distance



Exercise

- Objective: Measure distance between Maqueen and object
-
- Compare distance measured with reading from Maqueen

Reading	Distance
	3 cm
	5 cm
	10 cm
	15 cm
	20 cm

Exercise – Distance, Movement & Light

- Try this!
- Objective: Program Macqueen to perform the following
  - Move in the pattern that you like i.e. Left, forward etc.
  - At the same time showing your favourite colours
  - Stop when it detects an object in front
  - LED Flashes and Buzzer Sounds
  - Move again when object is removed