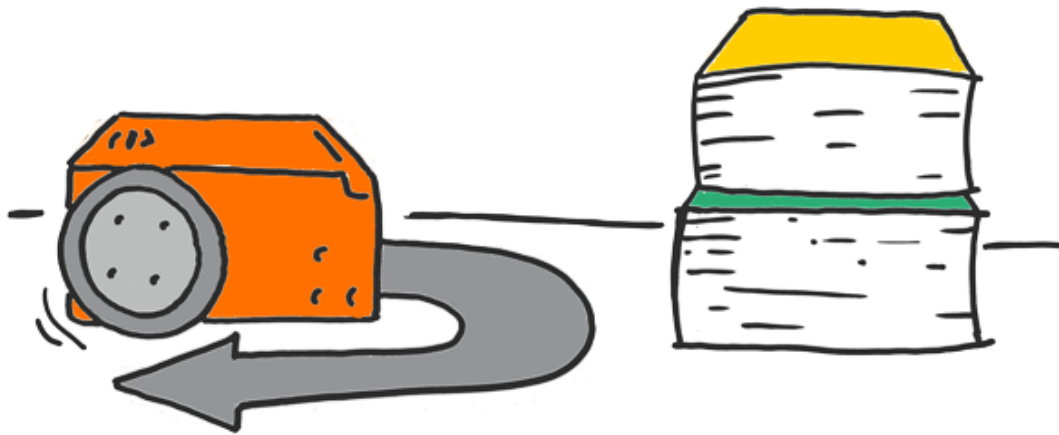# Let's detect and avoid

Edison's infrared light sensors let Edison detect objects. We can use these sensors to make different programs using EdBlocks.

This time, let's make a program that uses the infrared light sensors to tell Edison to detect obstacles, then turn away before running into them.

What to do with EdBlocks
Using the EdBlocks app, arrange the blocks into the program below.
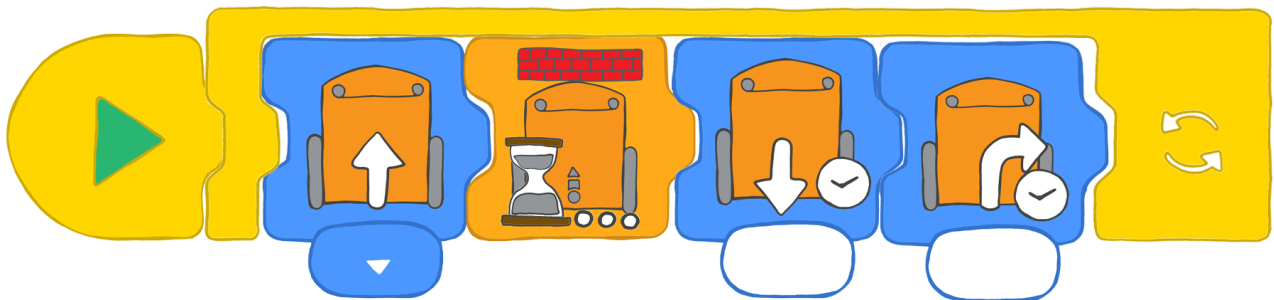
What does the program do?

The first block tells Edison to drive forward and the second block tells Edison to wait until an obstacle is detected. When an obstacle is detected, Edison moves to the third block, which tells Edison to back up. Then the fourth block turns Edison away from the obstacle. The loop tells the program to then start back at the first block.

You will need to experiment to work out how much time to put in the drive backwards and turn blocks.

What to do with Edison

Download the program to Edison. Put some obstacles you know Edison can detect around Edison. Run the program by pressing the play (triangle) button.

Watch as Edison uses the program to detect an object, then turn and drive away.

Find the answer

1. What time, in seconds, did you use in the 'drive backwards' block? Why did you use that time?

_____

_____

_____

2. What time, in seconds, did you use in the 'turn right' block? Why did you use that time?

_____

_____

_____

3. What else could Edison do when it detects an object? Try making a program where Edison alerts you it has detected an object before driving away. Draw your program below. Make sure you include a loop!