

5 Pseudocode

Pseudo that robo like you do...

Pseudocode:

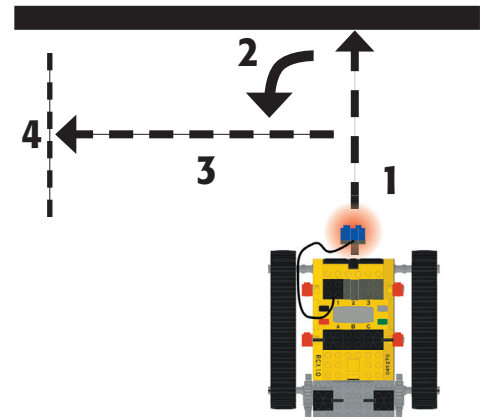
Pseudocode is a sort of halfway language between English and computer code. It lets you address the important details of your program without having to worry about the less relevant parts getting in your way. Our goal when developing pseudocode will be to identify and organize the simple behaviors a robot needs to complete its mission.

Example 1: Find Line and Turn

In example 1, we would like to program a robot to go straight until it sees a black line, turn left 90 degrees, and move forward for one second. Below is the pseudocode to accomplish that task. Note that this pseudocode describes a complex behavior that is made up of four simple behaviors.

Pseudocode:

1. Move forward until the light sensor sees black.
2. Turn left.
3. Move forward for one second.
4. Stop.



Example 2: Turn Across Lines

In example 2, the task is more difficult. The robot behavior we will program moves the robot up the right side of the line until the robot sees the line. When the robot gets to the line turn left and follow the top of the line. The pseudo code divides the task into nine simple behaviors.

Pseudocode:

1. Line track the right side of the line for 3 seconds.
 - a. If less than 3 seconds have passed, track the right side of a line.
 - b. If more than 3 seconds have passed, move on to the next step.
2. Turn until the light sensor sees white
3. Move forward until the light sensor sees black
4. Move forward until the light sensor sees white
5. Move forward a short distance
6. Turn left until the light sensor sees black
7. Turn left until the light sensor sees white
8. Turn left until the light sensor sees black
9. Line track the right side of the line

