

Separate Motor Control

Time required: 60 minutes

Please read all the directions carefully before beginning the assignment.

- Comment your code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

Understanding

Demonstrate understanding of:

Separate motor control, variables

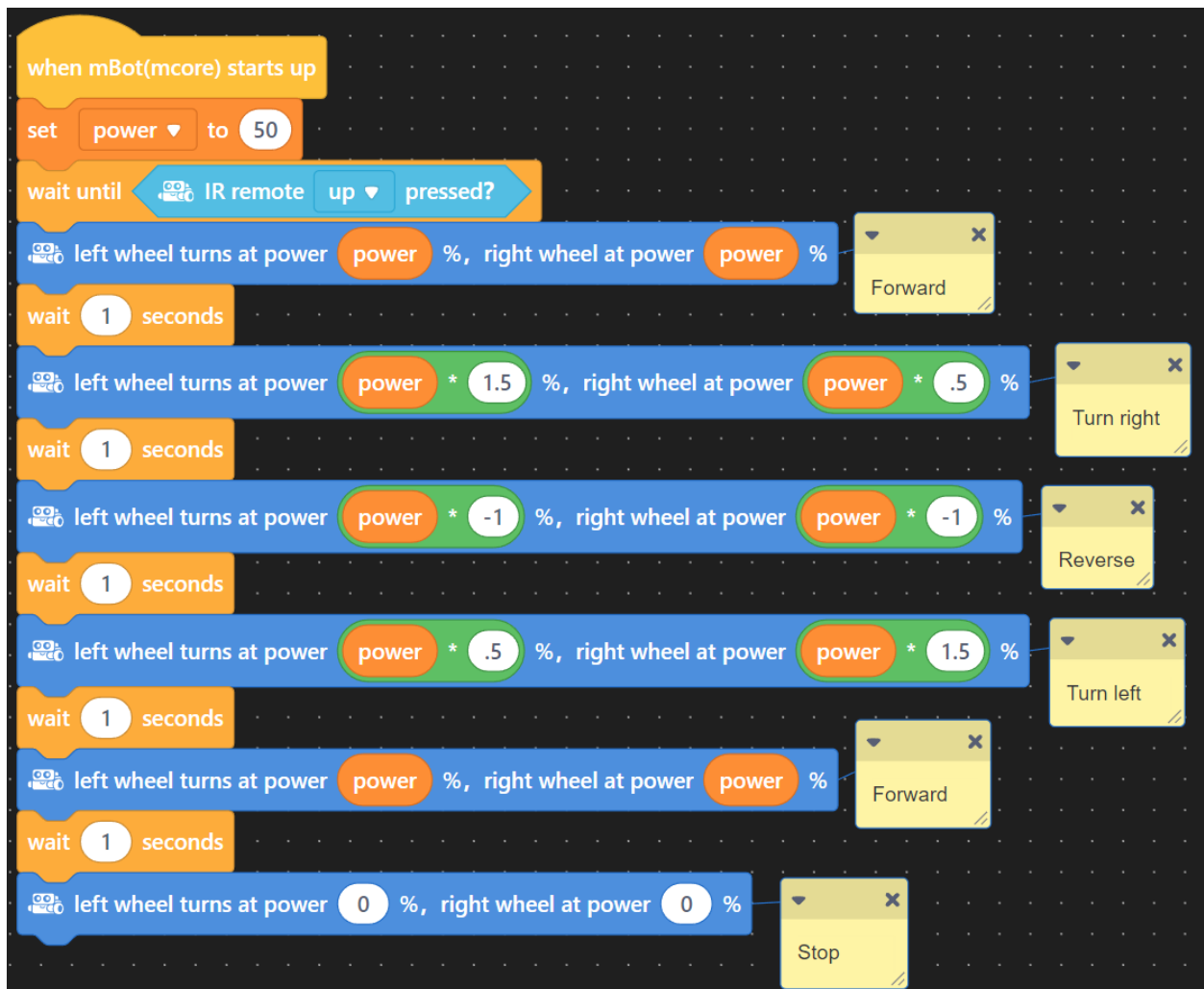
The following example controls the motors separately. By varying the power to each motor, the mBot can make different types of turns.

Requirements

- The program will run when you press the robot's remote-control button.
- Turn like a CAR.

Tutorial Assignment

1. Start mBlock. Save the program as **Separate Motor Control**.
2. Complete and test the program as pictured with the requirements listed.



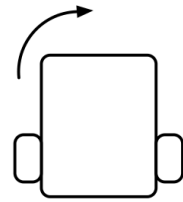
Assignment

Start with your tutorial project and add the following.

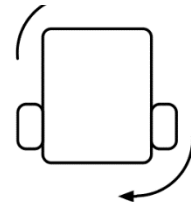
- Add car differential turns as shown in the figure.
- Add tank turns as shown in the figure.

Assignment Submission

- **All students** → Attach finished programs to the assignment in Blackboard.
- **In class assignment submission** → Demonstrate in person.
- **Online submission** → A link to a YouTube video recording showing the assignment placed in the submission area in BlackBoard.



*Figure 2:
Car*



*Figure 2:
Tank*