

## SOLUZIONE ATTIVITÀ 5-18

## Thymio al parcheggio

The image shows a Scratch script for controlling a Thymio robot. The script is divided into two main sections: a 'when clicked' event and a 'when green flag clicked' event.

**When clicked event:**

- Set speed to 50.
- Call the 'entre\_mur' function.
- Turn left 90 degrees with speed 50.
- Call the 'reculer' function.
- Wait for the space key to be pressed.
- Advance 300 units with speed 50.
- Turn right 120 degrees with speed 50.
- Call the 'entre\_mur' function.

**When green flag clicked event:**

- Define the 'reculer' function:
  - Set all motors to speed -50.
  - Wait until the distance to the back is less than 125.
  - Repeat until the distance to the back is less than 5.
  - If the right rear sensor is greater than the left rear sensor, then:
    - Set left motor to speed -40.
    - Set right motor to speed -20.
  - Otherwise:
    - Set left motor to speed -20.
    - Set right motor to speed -40.
  - Stop all motors.
- Define the 'entre\_mur' function:
  - Repeat until the space key is pressed.
  - If the distance to the front is equal to 190, then:
    - Set all motors to speed 'vitesse'.
  - Otherwise:
    - If the sum of the left and center-left sensors is greater than the sum of the center-right and right sensors, then:
      - Set left motor to speed 'vitesse' + 20.
      - Set right motor to speed 'vitesse' - 20.
    - Otherwise:
      - Set left motor to speed 'vitesse' - 20.
      - Set right motor to speed 'vitesse' + 20.