EXPERIMENT 18: COMPUTER OPERATED ROBOT

Objective: The Computer Operated Chelonia Bot experiment allows you to control the movements of a Chelonia using commands sent from your computer to the Arduino board. The bot can move forward, backward, turn left, turn right, or stop based on the received commands.

Setup:

- Assemble the Chelonia Bot hardware following the instructions in Section 2.1.
- Connect the Chelonia Bot to the Arduino IDE as explained in Section 2.3.
- Motor connections
- **Motor 1:**
  - Direction input 1 (motor1Dir1) IN1: Arduino pin 8
  - Direction input 2 (motor1Dir2) IN2: Arduino pin 9
- **Motor 2:**
  - Direction input 1 (motor2Dir1) IN3: Arduino pin 10
  - Direction input 2 (motor2Dir2) IN4: Arduino pin 11

Example Code:computer operated Chelonia

Usage instructions:

- Connect the power supply to the robot.
- Open the Serial Monitor in the Arduino IDE (Tools > Serial Monitor).
- Send commands from the computer to control the robot:
  - 'b': Move forward
  - 'f': Move backward
  - 'l': Turn left
  - 'r': Turn right
  - 's': Stop

Note: Ensure proper precautions when connecting and disconnecting components and avoid short circuits. Always disconnect the power supply when making changes to the circuit.