MATERIALS AND EQUIPMENT

The following materials and equipments were used to complete the experiment:

1. Arduino Uno Board

2. LED

3. Resistor

4. Button

5. Connecting Wires

6. Breadboard

7. Arduino IDE (Software)

PROCEDURE

The following steps were followed to complete the experiment and toggle the LED using the Arduino board and the button:

1. Connect the Arduino Uno board to the computer using a USB cable.

2. Insert the LED and a resistor serially into the breadboard and connect one leg from the resistor to pin 12 on the Arduino. Connect the other leg of the LED to the ground (GND).

3. Insert the button on the breadboard and connect one point to ground (GND) and attach a resistor serially to the other end of the button. Connect the other end of the resistor to 5V.

4. Connect the button to pin 2 on the Arduino.

5. Write the code to control the LED using the button, upload the code to the Arduino board using the "Upload" button in the IDE and observe the