

EXP—1

LED Blinking with Push Button

Aim:- Write an embedded C program to interface LED and push button with Arduino UNO.

Software used:- Arduino IDE and Simulator

Program:-

// Program to interface LED with Arduino UNO

const int buttonPin = 4; // Pin connected to pushbutton

const int ledPin = 12; // Pin connected to LED

int buttonState; // Give pushbutton a value

void setup()

{

pinMode(ledPin, OUTPUT); // Set LED pin as output

pinMode(buttonPin, INPUT); // Set pushbutton pin as input

}

void loop() { buttonState = digitalRead(buttonPin); // Read input from pin 4

if(buttonState == LOW) { // If pushbutton is pressed, set as low

digitalWrite(ledPin, HIGH); // Turn on LED

delay((500));

digitalWrite(ledPin, LOW);

delay(500);

}

else

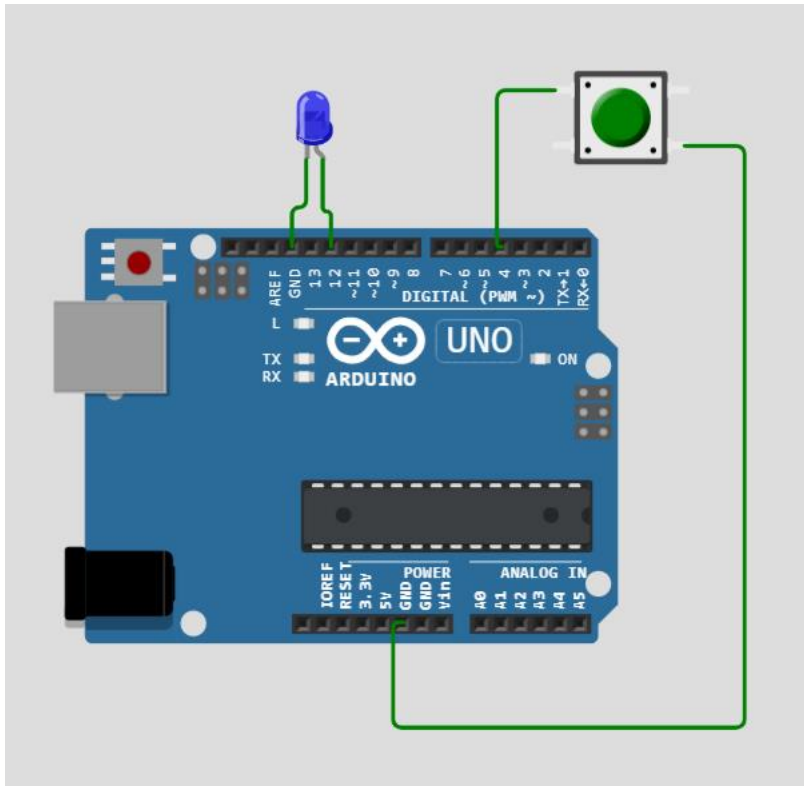
{

digitalWrite(ledPin, LOW); // Otherwise, turn off LED

}

}

Interfacing Diagram:-



Results:- The embedded program is written and simulated successfully.