

Ex. No:	LED BLINK
DATE:	

AIM:

Interface LED with Arduino and to write a program to turn on LED for 1 sec after every 2 sec.

COMPONENTS REQUIRED:

COMPONENTS	NOS
ARDUINO UNO	1
USB CABLE (A to B)	1
SERVO MOTOR	1
LED	1
RESISTOR	1

PROCEDURE:

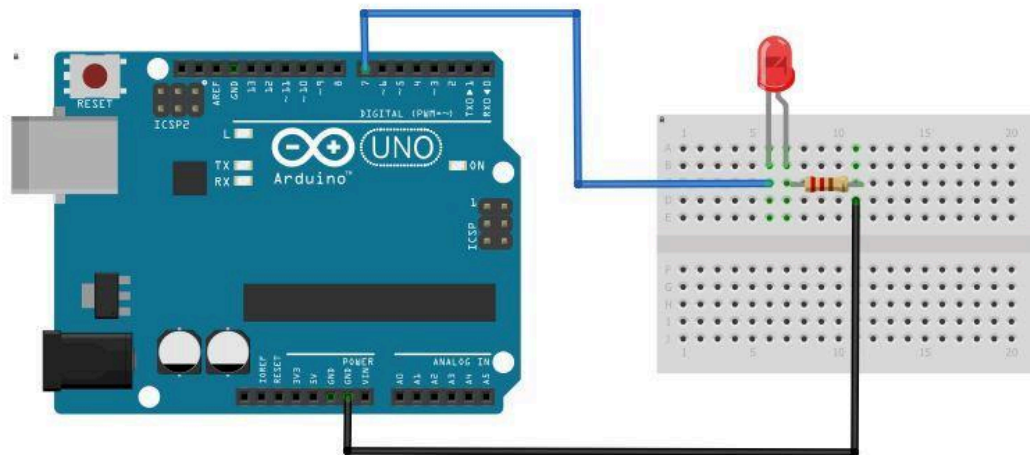
Step1: Connect the anode (long leg) of the LED to pin 13 (through a 220Ω resistor) and the cathode to GND.

Step2: Connect the power pin (usually the red wire) of the servo to the **5V** pin on the Arduino. (If the servo requires higher power, use an external power source like a 6V battery, but ensure the grounds are connected.)

Step3: Open arduino IDE and type the coding.

Step4: Click **Upload** in the IDE to load the code onto your Arduino.

SCHEMATIC DIAGRAM:



PROGRAM:

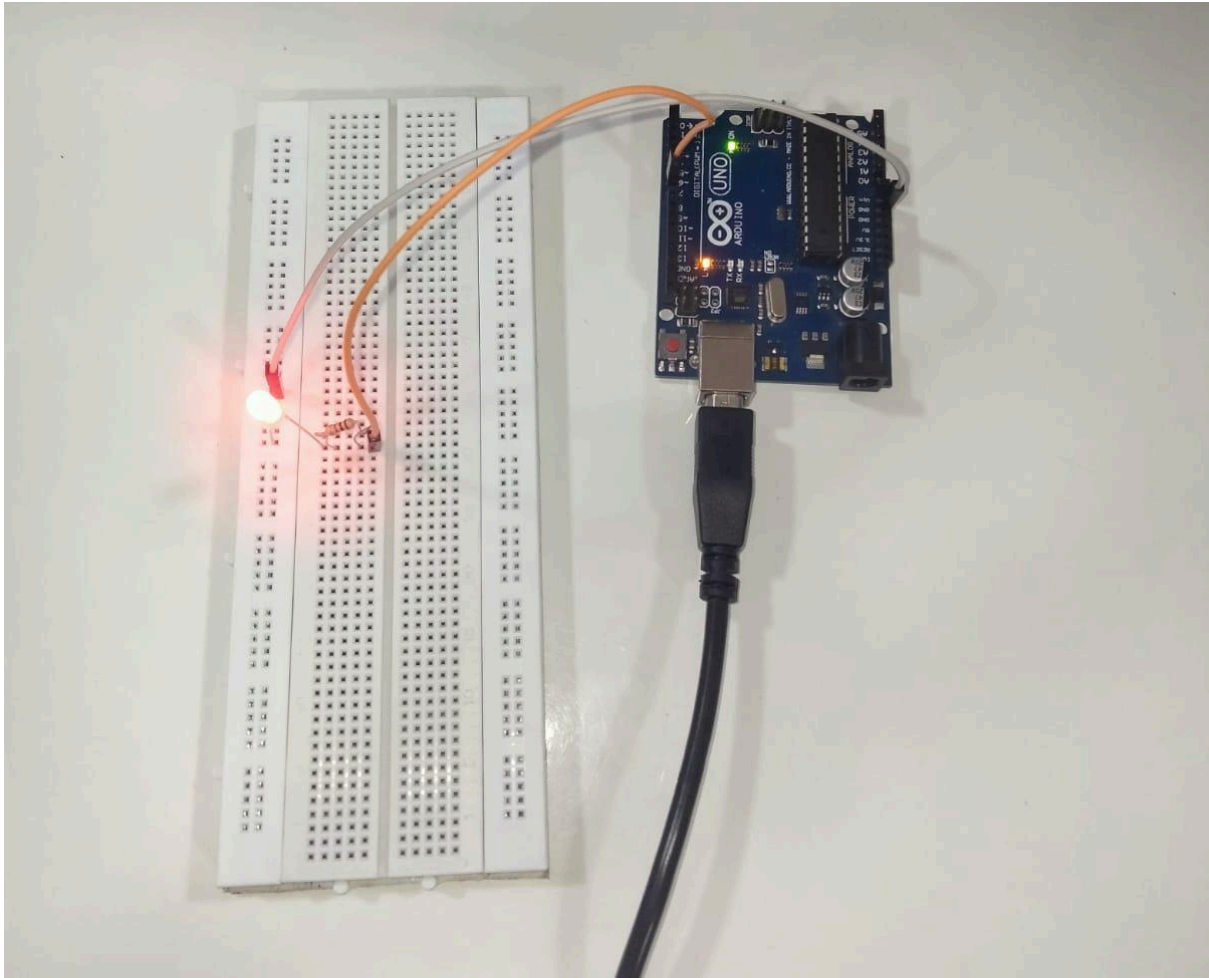
```
int ledPin = 13; // Built-in LED pin on most Arduino boards (or you can use any digital pin)
```

```
void setup() {  
  pinMode(ledPin, OUTPUT); // Set the LED pin as an output  
}
```

```
void loop() {  
  digitalWrite(ledPin, HIGH); // Turn the LED on  
  delay(1000);                // Wait for 1 second
```

```
  digitalWrite(ledPin, LOW); // Turn the LED off  
  delay(2000);               // Wait for 2 seconds  
}
```

OUTPUT:



RESULT:

Thus, the above program to blink LED using Arduino UNO board was executed and the output verified successfully.