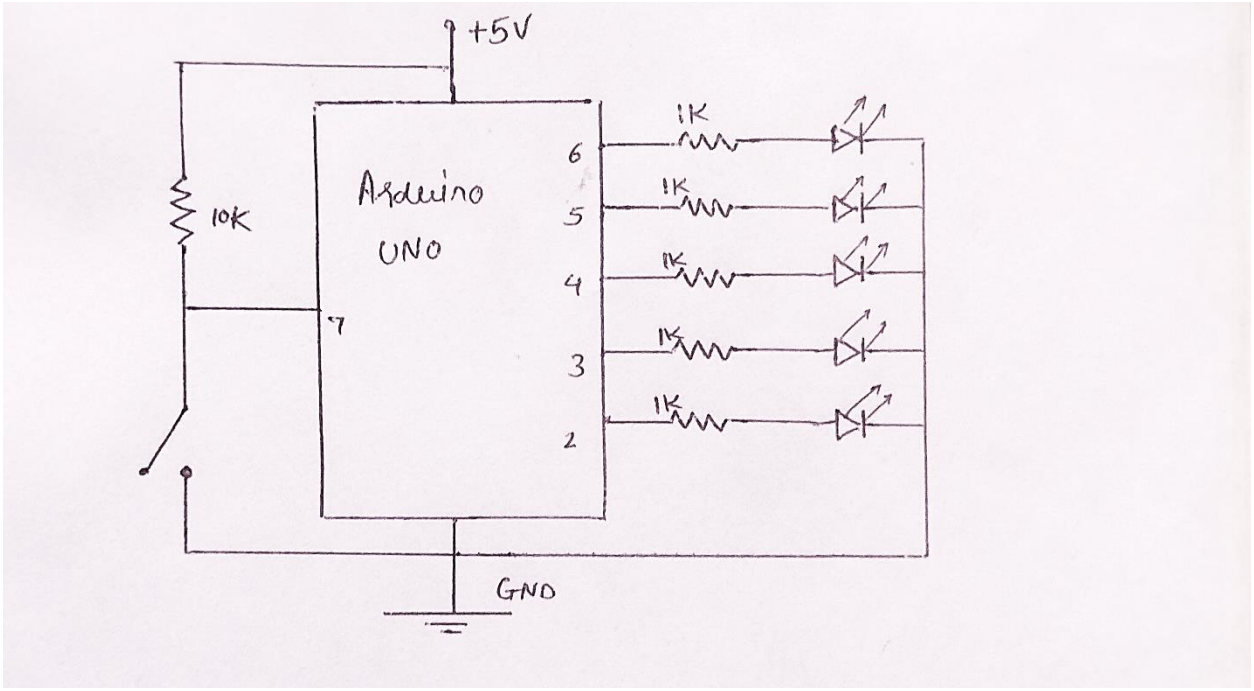
```
/*

Experiment No. :    02

Statement      :    Make running light pattern of 5 LEDs. It
                    should run in both the directions
                    continuously.One switch press would result
                    running of LEDs in one direction, while the
                    second switch press would result running of
                    LEDs in opposite direction.

Date of Exp.   :    xx/xx/xxxx

Author         :    Harsh Devendra Mishra (A-28)



*/
// Define the pins for the LEDs and the switch

const int ledPins[] = {2, 3, 4, 5, 6};
const int switchPin = 7;
const int numLeds = 5;

// Define the delay between each LED
const int delayTime = 100;

void setup() {
  // Set LED pins as outputs
  for (int i = 0; i < numLeds; i++) {
    pinMode(ledPins[i], OUTPUT);
  }

  // Set switch pin as input
  pinMode(switchPin, INPUT_PULLUP);
}

void loop() {
  // Read the state of the switch
  bool switchState = digitalRead(switchPin);

  // Run LEDs in the current direction
```

```
  if (switchState == LOW)
 {
    // Run LEDs backward
    for (int i = numLeds - 1; i >= 0; i--) {
      digitalWrite(ledPins[i], HIGH);
      delay(delayTime);
      digitalWrite(ledPins[i], LOW);
    }
  } else {
    // Run LEDs forward
    for (int i = 0; i < numLeds; i++) {
      digitalWrite(ledPins[i], HIGH);
      delay(delayTime);
      digitalWrite(ledPins[i], LOW);
    }
  }
}
```


+5V
Arduino
UNO
10K
7
6
5
4
3
2
1K
1K
1K
1K
1K
GND