Experiment No. : 02

Statement :

Make experiment 1 work with two switches. 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

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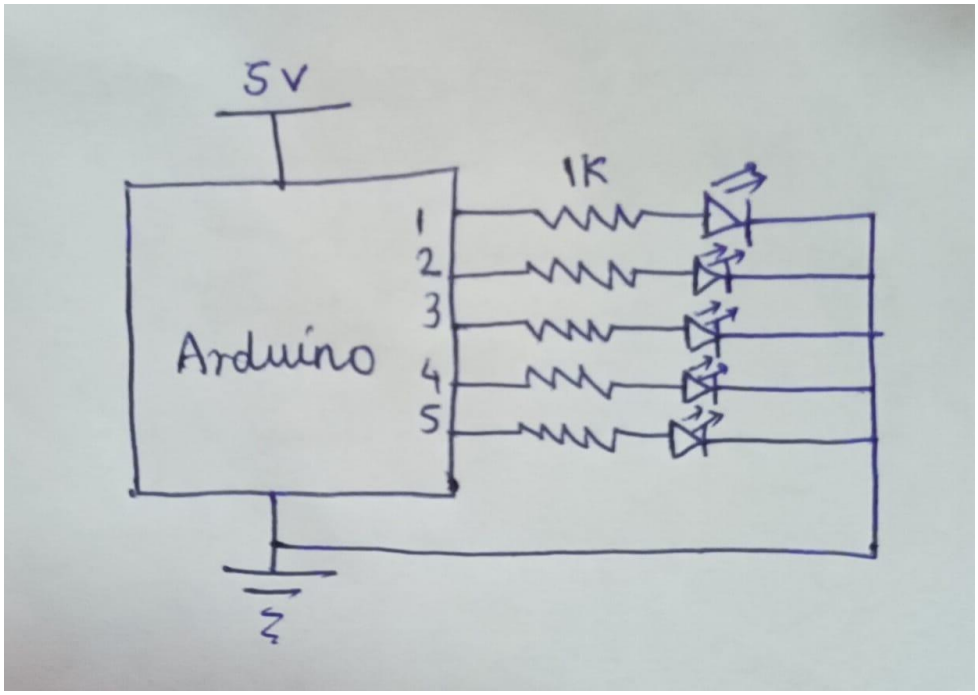
```
// Define pin numbers for
buttons and LEDs int button1
= 7;
int
button2 =
8; int
led1 = 2;
int led2
= 3; int
led3   =
4;   int
led4   =
5;   int
led5   =
6;

void setup() {
```

```
// Set the LED pins
as output
pinMode(led1,
OUTPUT);
pinMode(led2,
OUTPUT);
pinMode(led3,
OUTPUT);
pinMode(led4,
OUTPUT);
```

```
 pinMode(led5, OUTPUT);
 // Set the button
 pins as input
 pinMode(button1,
 INPUT);
 pinMode(button2,
 INPUT);
}

void loop() {

 // Read the state of buttons

 int pin1 =
 digitalRead(button1);
 int pin2 =
 digitalRead(button2);

 // Forward loop if button1 is pressed

 if (pin1 == LOW) {

  for (int i = 2; i < 7;
   i++) { digitalWrite(i,
   HIGH); // Turn on LED
   delay(200); // Wait for
```

```
  200 milliseconds
  digitalWrite(i, LOW); //
  Turn off LED delay(200);
  // Wait for 200
  milliseconds
 }
}
```

```
 // Backward loop if button2 is pressed

 else if (pin2 == LOW) {

  for (int i = 6; i > 1; i--) {
   digitalWrite(i, HIGH); //
   Turn on LED delay(200); //
   Wait for 200 milliseconds
   digitalWrite(i, LOW); //
   Turn off LED delay(200);
   // Wait for 200
   milliseconds
  }
 }
}
```


5V
1K
Arduino
1
2
3
4
5