

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

Author : Vidhee Agrawal (A-29)

```
// 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
    }
}
}
```

