**Ex: 11**                          **Servo Motor Control**

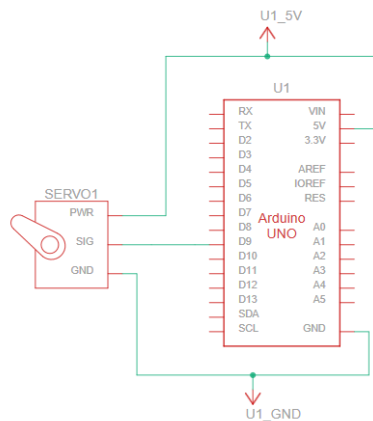<u>**Aim**</u>:

　　　To interface Servo Motor and control its movement using Arduino Uno.

<u>**Components Required:**</u>

- Arduino Uno Board
- Servo Motor
- Jumpers

<u>**Circuit Connection:**</u>



<u>**Pin Connections between Servo Moto and Arduino UNO**</u>

| Servo | Arduino UNO Pin |
|---|---|
| Ground | Ground |
| Signal | D9 |
| Power | +5V |

<u>**Sketch**</u>

```
#include <Servo.h>
int servoPin = 9;
Servo servo;
int angle = 0;  // servo position in degrees

void setup() {
   servo.attach(servoPin);
}
```

```
void loop() {
  // scan from 0 to 180 degrees
  for(angle = 0; angle < 180; angle++) {
   servo.write(angle);
   delay(15);
  }
   // now scan back from 180 to 0 degrees
  for(angle = 180; angle > 0; angle--) {
     servo.write(angle);
     delay(15);
  }
}
```

**Result:**

   Thus Arduino Uno board is utilized to control Servo Motor movement.