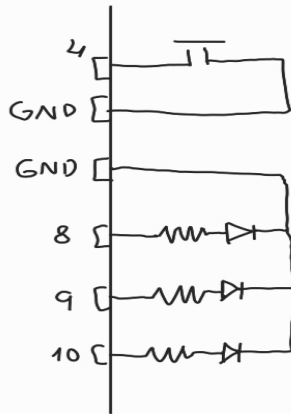# CIRCUIT DIAGRAM

SOURCE CODE

```
#define RED_LED 8
#define GREEN_LED 9
#define BLUE_LED 10
#define SW_PIN 4

int count = 0;
boolean curState = false;
boolean prevState = false;

void setup() {
  pinMode(RED_LED, OUTPUT);
  pinMode(GREEN_LED, OUTPUT);
  pinMode(BLUE_LED, OUTPUT);
  pinMode(SW_PIN, INPUT_PULLUP);

  digitalWrite(RED_LED, LOW);
  digitalWrite(GREEN_LED, LOW);
  digitalWrite(BLUE_LED, LOW);
}
```

```
void loop() {
 prevState = curState;
 if(digitalRead(SW_PIN) == LOW) {
  curState = true;
  if(prevState != curState) {
   count = (count + 1) % 6;
   if(count == 1) {
    digitalWrite(RED_LED, HIGH);
   } else if(count == 2) {
    digitalWrite(GREEN_LED, HIGH);
   } else if(count == 3) {
    digitalWrite(BLUE_LED, HIGH);
   } else if(count == 4) {
    digitalWrite(RED_LED, LOW);
   } else if(count == 5) {
    digitalWrite(GREEN_LED, LOW);
   } else if(count == 0) {
    digitalWrite(BLUE_LED, LOW);
   }
  }
 } else {
  curState = false;
 }
}
```

NOTES AND OBSERVATIONS

If the switch is pressed multiple times very quick, it gives the feeling that it doesn't work very well, although I'm not sure if it's because there's a slight delay. Pressing it at a slower pace works corrrectly.