

Lab 2 : Program 4

Date : 23/09/20

Experiment : Traffic Controller

Aim: To simulate Traffic Lights.

Hardware :

- Arduino Uno Board
- LED bulbs : Red, Green and Yellow
- 220 Ohm Resistors

Source :

```
int r = 4 , rdelay = 7500 ;  
int y = 3 , ydelay = 2500 ;  
int g = 2 , gdelay = 5000 ;
```

```
void red()  
{  
    digitalWrite(r,HIGH);  
    digitalWrite(y,LOW);  
    digitalWrite(g,LOW);  
}
```

```
void yellow()  
{  
    digitalWrite(y,HIGH);  
    digitalWrite(r,LOW);  
    digitalWrite(g,LOW);  
}
```

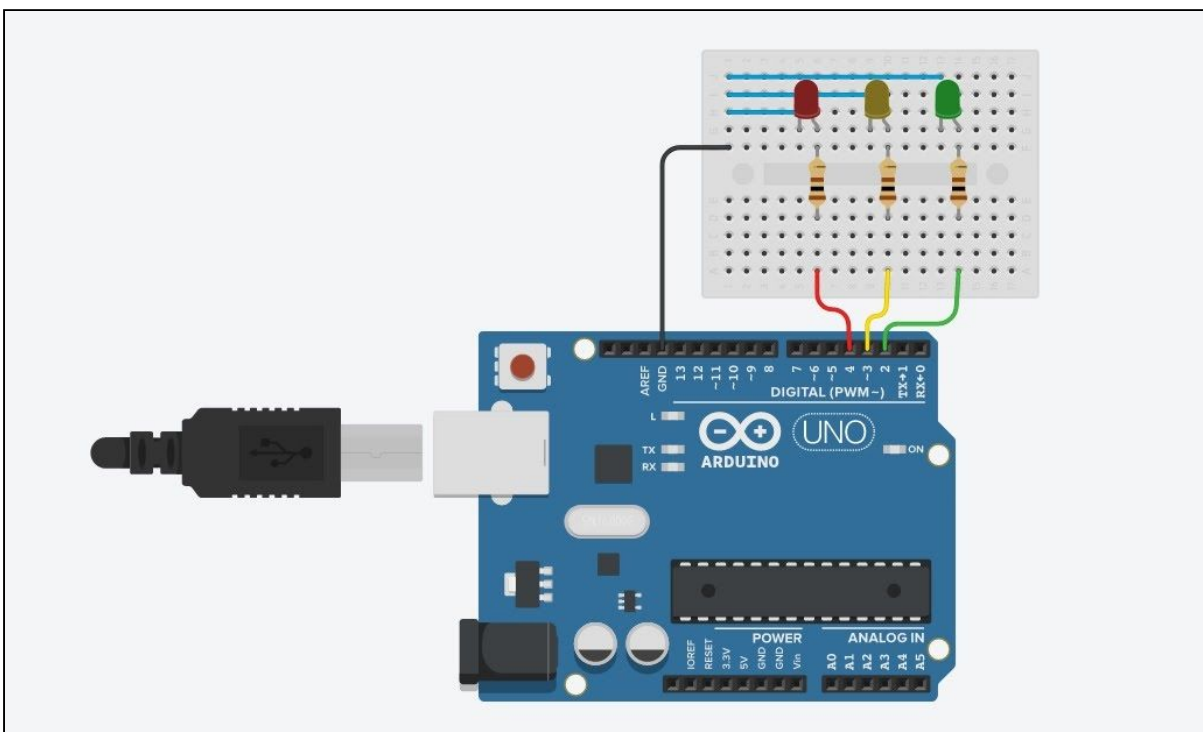
```
void green()  
{  
    digitalWrite(g,HIGH);  
    digitalWrite(y,LOW);  
    digitalWrite(r,LOW);  
}
```

```
void setup()
{
  pinMode(r, OUTPUT);
  pinMode(y, OUTPUT);
  pinMode(g, OUTPUT);
}
```

```
void loop()
{
  red();
  delay(rdelay);
  yellow();
  delay(ydelay);
  green();
  delay(gdelay);
  yellow();
  delay(ydelay);
}
```

Observation : The traffic lights are controlled

Circuit :



Write Up :

IOT LAB 2

Traffic Lights

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23/09/20

Source Code

```
int r = 4, redelay = 7500;  
int y = 3, ydelay = 2500;  
int g = 2, gdelay = 5000;
```

```
void red() {
```

```
    digitalWrite(r, HIGH);  
    digitalWrite(y, LOW);  
    digitalWrite(g, LOW); delay(7500);  
}
```

```
void yellow() {
```

```
    digitalWrite(r, LOW);  
    digitalWrite(y, HIGH);  
    digitalWrite(g, LOW);  
    delay(2500);  
}
```

```
void green() {
```

```
    digitalWrite(r, LOW);  
    digitalWrite(y, LOW);  
    digitalWrite(g, HIGH);  
    delay(5000);  
}
```

```
void setup() {
```

```
    pinMode(r, OUTPUT);  
    pinMode(y, OUTPUT);  
    pinMode(g, OUTPUT);  
}
```

```
void loop() {
```

```
    red();  
    yellow();  
    green();  
    yellow();  
}
```