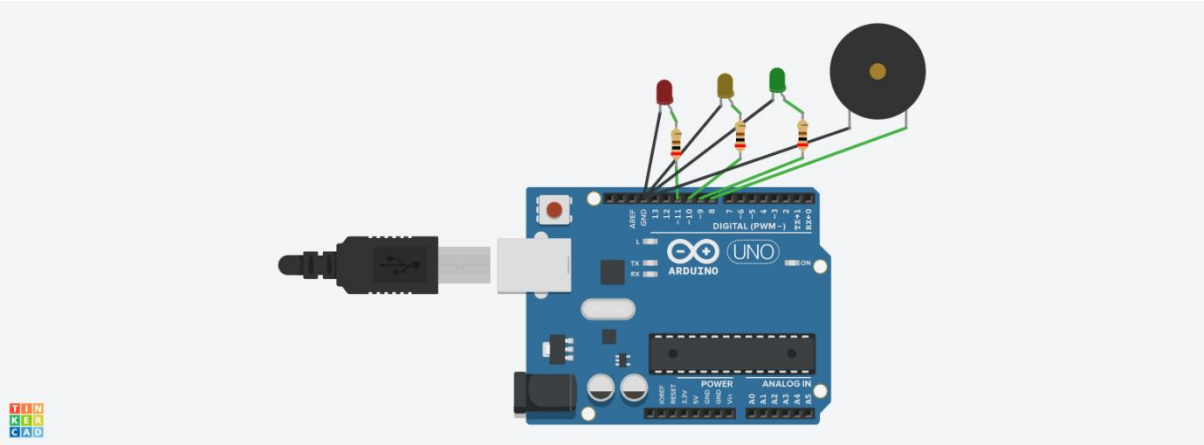
Lecture Assignment – 2

Aryaman Gautam

J001

1. A traffic signal has red which is on for 5 sec. In the last 2 sec we hear the buzzer with frequency of 440 Hz, followed by yellow light blinking 5 times which is on and off for 0.5 sec each followed by green which is on for 5 sec. At the last 2 sec of green, we hear a buzzer of 440 Hz frequency.

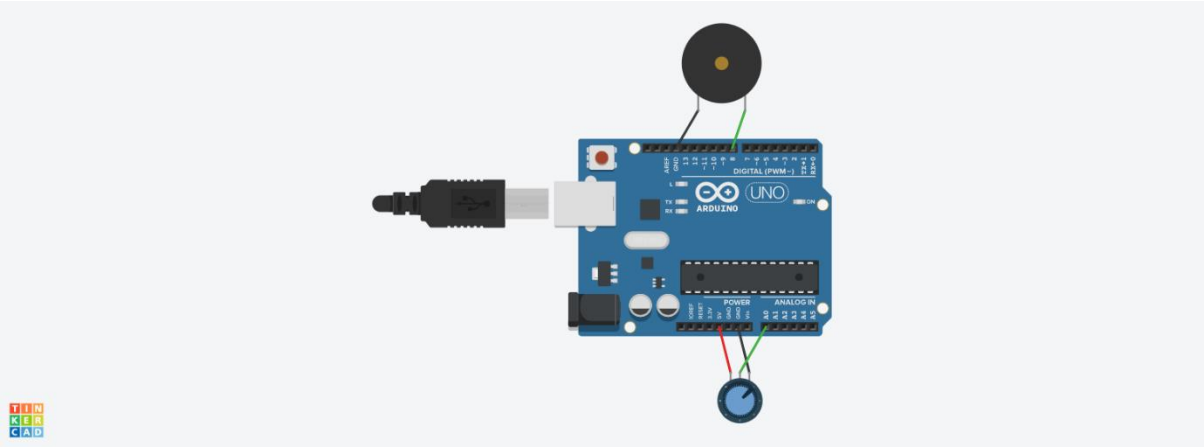



```
void setup()
{
  pinMode(11, OUTPUT);//red
  pinMode(10, OUTPUT);//yellow
  pinMode(9, OUTPUT); //green
  pinMode(8, OUTPUT); //buzzer
}

void loop()
{
  digitalWrite(11, HIGH);
  delay(3000);
  tone(8,440);
```

```
  delay(2000);
  noTone(8);
  digitalWrite(11,LOW);
  for (int i=0; i<5; i++){
    digitalWrite(10,HIGH);
    delay(500);
    digitalWrite(10,LOW);
    delay(500);
  }
  digitalWrite(9,HIGH);
  delay(3000);
  tone(8,440);
  delay(2000);
  noTone(8);
  digitalWrite(9,LOW);
}
```

2. Control the buzzer tone using Potentiometer.



```
void setup()
{
  pinMode(A0, INPUT);
  pinMode(8, OUTPUT);


}

void loop()
{
  int sensorValue = analogRead(A0);
  tone(8, sensorValue);
}
```