

## ACTIVITY 4

### Traffic Light Signals:

#### Task:

- Design traffic signals containing Red, Orange, and Green lights.
- The traffic light stays in the Red state for 5sec, Green state for 5 sec and takes 2 sec to change from Red to Green i.e Orange state.

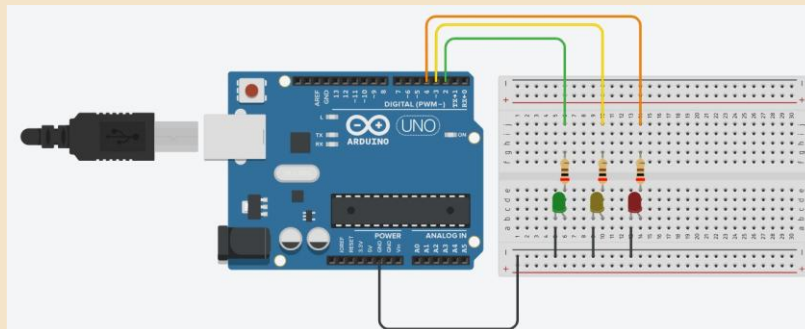
#### Questions:

- What is the change in Code required if the starting state is changed to 'Green'?
- Change the durations of Red, Green and Orange States
- What is the purpose of `delay()` function in programming? What are the units of value mentioned inside the parentheses?

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#### Components:

- Arduino
- LED's (3)
- Breadboard
- Resistors-220 $\Omega$  (3)



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```
void setup()
{
  pinMode(2, OUTPUT); //Green
  pinMode(3, OUTPUT); //Orange
  pinMode(4, OUTPUT); //Red
}
```

```
void loop()
{
  digitalWrite(4, HIGH);
  digitalWrite(3, LOW);
  digitalWrite(2, LOW);
  delay(5000); // Wait for 5 second(s)
  digitalWrite(4, LOW);

  digitalWrite(3, HIGH);
  delay(2000); // Wait for 2(s)

  digitalWrite(4, LOW);
  digitalWrite(3, LOW);
  digitalWrite(2, HIGH);
  delay(5000); // Wait for 5(s)
```

MODIFY CODE so that orange red light blinks in last 1 sec

And also green blinks in last one sec