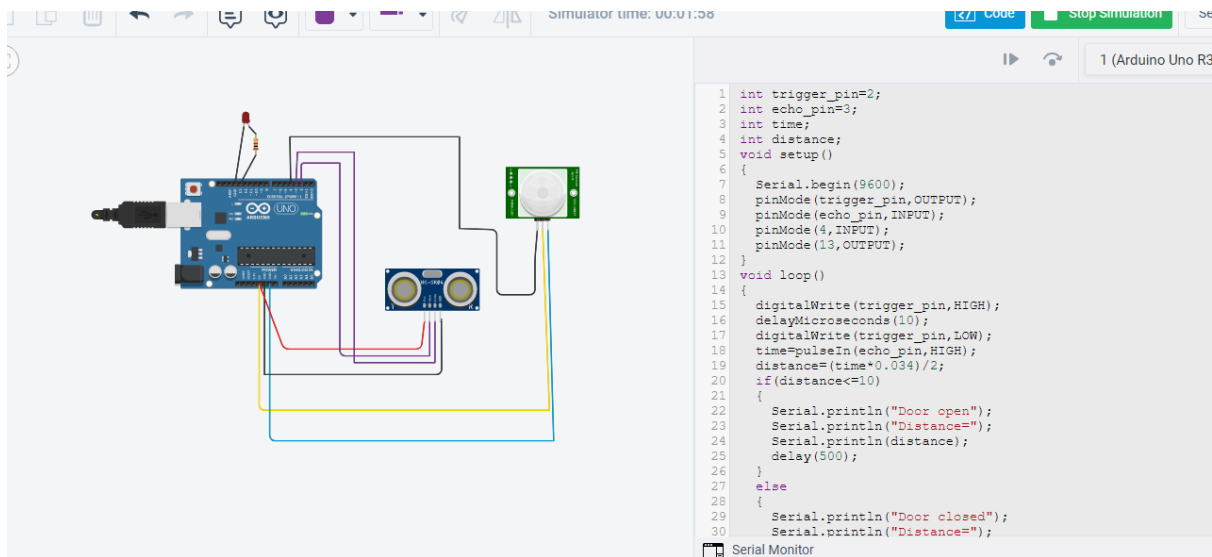


NAME:Maheswari J

REG NO:710719104057

CIRCUIT



CODE:

```
int trigger_pin=2;

int echo_pin=3;

int time;

int distance;

void setup()

{

  Serial.begin(9600);

  pinMode(trigger_pin,OUTPUT);

  pinMode(echo_pin,INPUT);

  pinMode(4,INPUT);

  pinMode(13,OUTPUT);
```

```
}  
  
void loop()  
{  
    digitalWrite(trigger_pin,HIGH);  
    delayMicroseconds(10);  
    digitalWrite(trigger_pin,LOW);  
    time=pulseIn(echo_pin,HIGH);  
    distance=(time*0.034)/2;  
    if(distance<=10)  
    {  
        Serial.println("Door open");  
        Serial.println("Distance=");  
        Serial.println(distance);  
        delay(500);  
    }  
    else  
    {  
        Serial.println("Door closed");  
        Serial.println("Distance=");  
        Serial.println(distance);  
        delay(500);  
        int p=digitalRead(4);  
        if(p)  
        {  
            digitalWrite(13,HIGH);  
            Serial.println("motion detected");  
        }  
    }  
}
```

```
else  
  
{  
    digitalWrite(13,LOW);  
    Serial.println("not detected");  
}  
  
}  
  
}
```