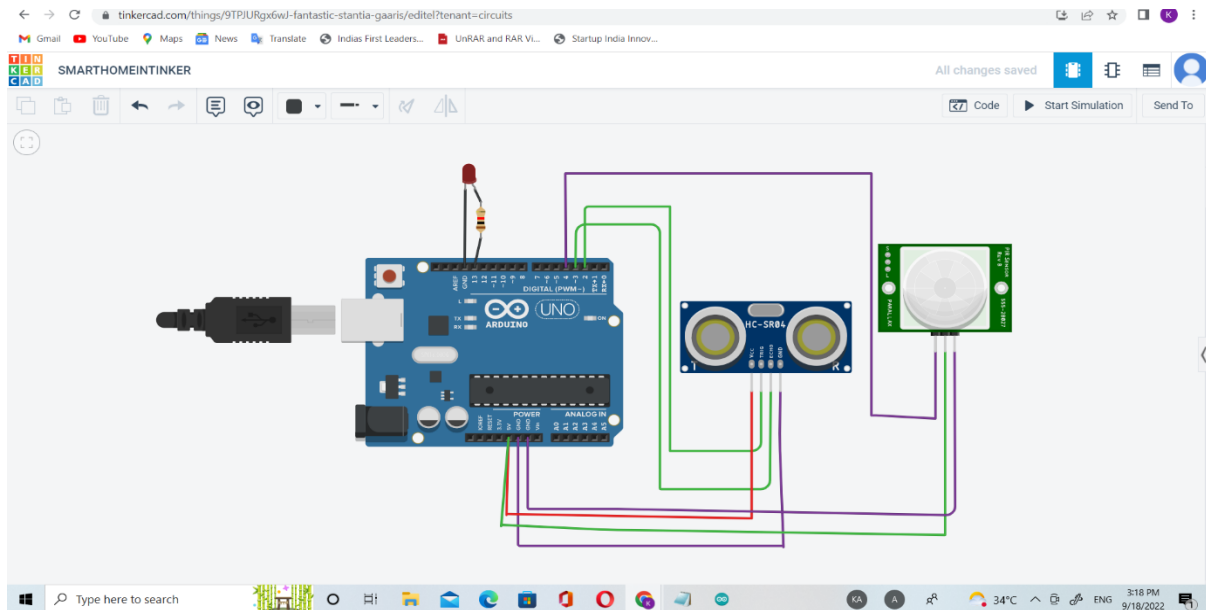


**Assignment -1**  
**TOPIC : SMART HOME**

Assignment Date	7 OCTOBER 2022
Student Name	KEERTHANA.A
Student Roll Number	411719205023
Maximum Marks	2 Marks



**TINKER CAD**

**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.print("Distance=");
    Serial.println(distance);
    delay(500);
  }
  else{
    Serial.println("Door closed");
    Serial.print("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");  
}  
}  
}
```