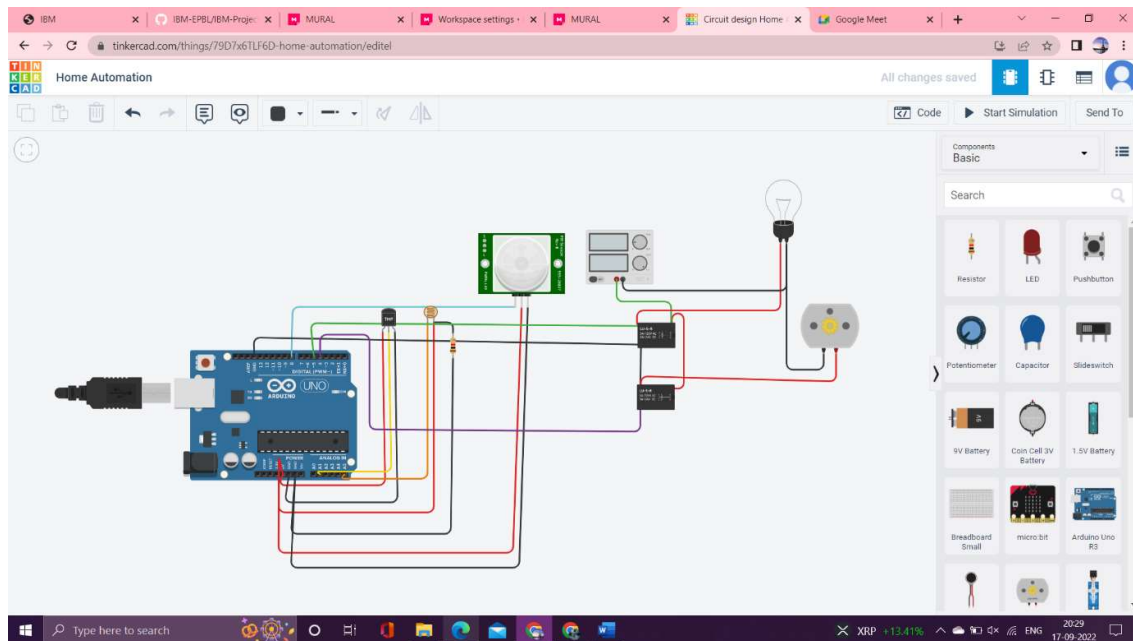


ASSIGNMENT – 1

(HOME AUTOMATION)

Circuit Connection:



Program:

```
float x,y,z,temp;

void setup()
{
  pinMode(8, INPUT);
  pinMode(5, OUTPUT);
  pinMode(6, OUTPUT);
  pinMode(A5, INPUT);
  pinMode(A4, INPUT);
  Serial.begin(9600);
}

void loop()
```

```
{  
  x= digitalRead(8);  
  y= analogRead(A5);  
  z= analogRead(A4);  
  Serial.println(x);  
  Serial.println(y);  
  Serial.println(z);  
  temp = (double)z / 1024;  
  temp = temp * 5;  
  temp = temp - 0.5;  
  temp = temp * 100;  
  if ( (x>0) )  
  {  
    if ((y<550)&&(temp>30))  
    {  
      digitalWrite(5, HIGH);  
      digitalWrite(6, HIGH);  
    }  
    else if((y<550)&&(temp<30))  
    {  
      digitalWrite(5, HIGH);  
      digitalWrite(6, LOW);  
    }  
    else if((y>550)&&(temp>30))  
    {  
      digitalWrite(5, LOW);  
      digitalWrite(6, HIGH);  
    }  
    else if((y>550)&&(temp<30))
```

```

{
  digitalWrite(5, LOW);
  digitalWrite(6, LOW);
}
}
else
{
  digitalWrite(5, LOW);
  digitalWrite(6, LOW);
}
}

```

Simulation:

