

Assignment -1

Home Automation

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

Question-1:

Make a home automation with tinkercad, add 2-3 sensors led buzzers and make a common code and circuit. Multiple detections and alarms should be given.

Solution:

```
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);
}
}
```

