

## Assignment -1

### Home Automation

Assignment Date	19 September 2022
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Student Roll Number	210619106020
Maximum Marks	2 Marks

#### Question-1:

Build a smart home in Thinkercad with 2 sensors, an Led, buzzer.

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);
}
}
```

