

ASSIGNMENT-1

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

```
int led=13;
int PhotoDiode=2;
int pir=5;
int buzz=3;
void setup()
{
  pinMode(led,
  OUTPUT);
  pinMode(pir, INPUT);
    pinMode(PhotoDiode, INPUT_PULLUP);
}
void ledFunction(){
  if(digitalRead(PhotoDiode)==HIGH)
  {
    digitalWrite(led, HIGH);
  }
  else
  {
    digitalWrite(led, LOW);
  }
}
void buzzer(){
  if(digitalRead(pir)==HIGH)
  {
    analogWrite(10, random(255));

    tone(buzz,50);
    delay(2000);
  }
}
```

```
else  
{  
noTone(buzz);
```

```
    delay(2000);
```

```
  }
```

```
void loop()
```

```
{
```

```
    ledFunction();
```

```
    Serial.print(pir);
```

```
    buzzer();
```

```
}
```