

Assignment -1
Python Programming

Assignment Date	13 September 2022
Student Name	Pratheepraj R
Student Roll Number	73771914150
Maximum Marks	2 Marks

Question-1:

Make a Smart Home in Tinkercad, using 2+ sensors, Led, Buzzer in single code and circuit.

Code:

```
int distance = 0; int cm = 0; long
readUltrasonicDistance(int triggerPin, int echoPin)
{
    pinMode(triggerPin, OUTPUT); // Clear the
    trigger digitalWrite(triggerPin, LOW);
    delayMicroseconds(2); digitalWrite(triggerPin,
    HIGH); delayMicroseconds(10);
    digitalWrite(triggerPin, LOW); pinMode(echoPin,
    INPUT); return pulseIn(echoPin, HIGH);
}

void setup()
{Serial.begin(9600);
    pinMode(2, OUTPUT);
    pinMode(3, OUTPUT);
    pinMode(4, OUTPUT);
}

void loop()
{
    distance = 330; cm = 0.01723 *
    readUltrasonicDistance(6, 7);
    Serial.print(cm); Serial.println("cm"); if (cm >
```

```
distance) { digitalWrite(2, LOW);  
  digitalWrite(3, LOW); digitalWrite(4, LOW);  
} else { if (cm > 230) {  
  digitalWrite(2, LOW);  
  digitalWrite(3, LOW);  
  digitalWrite(4, HIGH);  
} else  
{  
if (cm > 100) { digitalWrite(2,  
  LOW); digitalWrite(3,  
  HIGH); digitalWrite(4,  
  LOW);  
} else  
{  
if (cm > 1) {  
  digitalWrite(2, HIGH);  
  digitalWrite(3, LOW);  
  digitalWrite(4, LOW);  
} else  
{  
  digitalWrite(2, LOW);  
  digitalWrite(3, LOW);  
  digitalWrite(4, LOW);  
}  
}  
}  
}  
delay(100);  
}
```

