RMK COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM NALAIYA THIRAN

ASSIGNMENT-1

TEAM LEADER:SWETHA R

TEAM MEMBER: ANUSHA R

DEEPTHI J

POOJA SHREE K

NANDHINI M

SMART HOME AUTOMATION-DOOR BUZZER

CODING:

```
int trig=2;
int echo=3;

int buzzer=10;

int time;

int distance;

void setup()

{

  Serial.begin(9600);

  pinMode(trig,OUTPUT);

  pinMode(echo,INPUT);

  pinMode(buzzer,OUTPUT);

}

void loop()

{

  digitalWrite(trig,HIGH);
```

```
  delayMicroseconds(10);

digitalWrite(trig,LOW);

time=pulseIn (echo,HIGH);

distance=(time*0.034)/2;

if(distance<=10)

{

  Serial.println("DOOR OPEN");

 Serial.print("distance:");

 Serial.println(distance);

 digitalWrite(buzzer,HIGH);

 delay(500);

}

else
{

  Serial.println("DOOR CLOSED");

 Serial.print("distance:");

 Serial.println(distance);

 digitalWrite(buzzer,LOW);

 delay(500);

}

}
```

```
11      pinMode(buzzer,OUTPUT);
12  }
13  void loop()
14  {
15      digitalWrite(trig,HIGH);
16      delayMicroseconds(10);
17      digitalWrite(trig,LOW);
18      time=pulseIn (echo,HIGH);
19      distance=(time*0.034)/2;
20  if(distance<=10)
21  {
22        Serial.println("DOOR OPEN");
23        Serial.print("distance:");
24        Serial.println(distance);
25      digitalWrite(buzzer,HIGH);
26      delay(800);
27  }
28  else
29  {
30        Serial.println("DOOR CLOSED");
31        Serial.print("distance:");
32        Serial.println(distance);
33      digitalWrite(buzzer,LOW);
34      delay(800);
35  }
36  }
37
38
39
```

Serial Monitor

```
DOOR OPEN
distance:2
DOOR OPEN
distance:2
DOOR OPEN
distance:2
DOOR OPEN
distance:2
DOOR OPEN
```