

SMART HOME AUTOMATION

Assignment 1

PROGRAM:

```
int sensor=0;
int distanceThreshold = 0;
const int buzzer = 8;
int echopin = 7;
int trigpin = 6;
int cm = 0;
int inches = 0;

int mesafe;
int sure;
void setup()
{
  pinMode(buzzer, OUTPUT);
  pinMode(trigpin, OUTPUT);
  pinMode(echopin, INPUT);
  pinMode(13,OUTPUT);
  pinMode(2,INPUT);
  Serial.begin(9600);
}
void loop()
{
  sensor=digitalRead(2);
  if(sensor==HIGH){
    digitalWrite(13,HIGH);
  }else{
    digitalWrite(13,LOW);
  }
  delay(10);
  digitalWrite(trigpin,LOW);
  delayMicroseconds(2);
  digitalWrite(trigpin,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigpin,LOW);
  sure = pulseIn(echopin,HIGH);
  mesafe = (sure/2)/29.0;

  if(mesafe <= 15)
```

```

{
digitalWrite(buzzer,HIGH);

}
else
{
digitalWrite(buzzer,LOW);

}

}

```

Circuit Diagram:

