```
int t = 2;
int e =3;
int b = 10;
int time;
int distence;
void setup()
{
  Serial.begin(9600);
  pinMode (t, OUTPUT);
  pinMode (e, INPUT);
  pinMode  (b, OUTPUT);
}
void loop ()
{
  digitalWrite (t, HIGH);
  digitalWrite (t, LOW);
  float dur = pulseIn (e, HIGH);
  float dis= (dur *0.034)/2;
  if ( dis <=10)
    Serial.println ("Door Open");
    Serial.print ("Distance =");
    Serial.println (dis);
    digitalWrite (b, HIGH);
    delay (500);

    Serial.println ("Door Closed");
    Serial.print ("Distence=");
    Serial.println(distence);
    digitalWrite (b,LOW);
    delay (500);
  }
```