```cpp
// C++ code
//
void setup()
{
  Serial.begin(9600);

  pinMode(7, OUTPUT);

  pinMode(6, INPUT);

  pinMode(3, OUTPUT);

  pinMode(1, INPUT);

  pinMode(13, OUTPUT);


}


void loop()
{
  digitalWrite(7, LOW);

   digitalWrite(7, HIGH);

  delayMicroseconds(10);

  digitalWrite(7, LOW);

  float dur=pulseIn(6,HIGH);

  float dis=((dur/2)*0.0343);

  if(dis<100)

  {

   digitalWrite(3,HIGH);

  }
```

```
  else
  {
    digitalWrite(3,LOW);
  }
  int value=digitalRead(1);
  if(value==1)
  {
    digitalWrite(13,HIGH);
  }
  else
  {
    digitalWrite(13,LOW);
  }

}
```