```cpp
const int trigpin=3;
const int echopin=4;
const unsigned int maxdist=23200;
void setup(){
pinMode(trigpin,OUTPUT);
digitalWrite(trigpin,LOW);
pinMode(echopin,INPUT);
Serial.begin(9600);
}
void loop(){
unsigned long t1;
unsigned long t2;
unsigned long pulsewidth;
float cm;
```

```
float inches;
digitalWrite(trigpin, HIGH);
delayMicroseconds(10);
digitalWrite(trigpin, LOW);
while(digitalRead(echopin)==0);
t1=micros();
while(digitalRead(echopin)==1);
t2=micros();
pulsewidth=t2-t1;
cm=pulsewidth/58;
inches=pulsewidth/148.0;
if(pulsewidth>maxdist){
Serial.println("Out of range");
}else{
Serial.println("Distance in cm: ");
Serial.println(cm);
if(cm<100){
while(true){
Serial.println("Alert");
}
}
}
delay(1000);
```