

ASSIGNMENT 1

```
long dd, cm, inches;

void setup() {
  Serial.begin (9600);
  pinMode(9,OUTPUT);
}

void loop()
{

  pinMode(11, OUTPUT);
  digitalWrite(11, LOW);
  delayMicroseconds(5);
  digitalWrite(11, HIGH);
  delayMicroseconds(10);
  digitalWrite(11, LOW);

  pinMode(11, INPUT);
  dd = pulseIn(11, HIGH);
  Serial.println(dd);

  cm = (dd/2) / 29.1;
  inches = (dd/2) / 74;

  if(inches > 57){
    digitalWrite(9, HIGH);
  }else if(inches < 4)
    digitalWrite(9, LOW);

  Serial.print(inches);
  Serial.print("in, ");
  Serial.print(cm);
  Serial.print("cm");
  Serial.println();

  delay(250);
}
```