

Assignment -1
Python Programming

Assignment Date	19 September 2022
Student Name	SAKTHIVEL R
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Maximum Marks	2 Marks

```
int triggerPin = 7;
int echoPin = 6;
unsigned long duration;
int distance;
int pinSensor =2;
int pinLed =12;
int pinBuzzer =13;
int pirSensor =0;
void setup()
{
  pinMode(triggerPin, OUTPUT);
  pinMode (echoPin, INPUT);
  Serial.begin(9600);
  pinMode(pinSensor, INPUT);
  pinMode(pinLed, OUTPUT);
  pinMode(pinBuzzer, OUTPUT);
}
void loop()
{
  digitalWrite(triggerPin, LOW);
  delayMicroseconds(2);
  //clearing the trigger
```

```
digitalWrite(triggerPin, HIGH);
delayMicroseconds(10);
digitalWrite(triggerPin, LOW);
  // capturing the time duration for sound wave to travel in microseconds
duration = pulseIn(echoPin, HIGH);
distance = 0.01723 * duration;
Serial.print(distance);
Serial.println("cm");
pirSensor = digitalRead(pinSensor);
if (pirSensor == HIGH)
{
  digitalWrite(pinLed, HIGH);
  tone(pinBuzzer, 1000, 500);
}
else {
  digitalWrite(pinLed, LOW);
}
delay(10);
}
```

