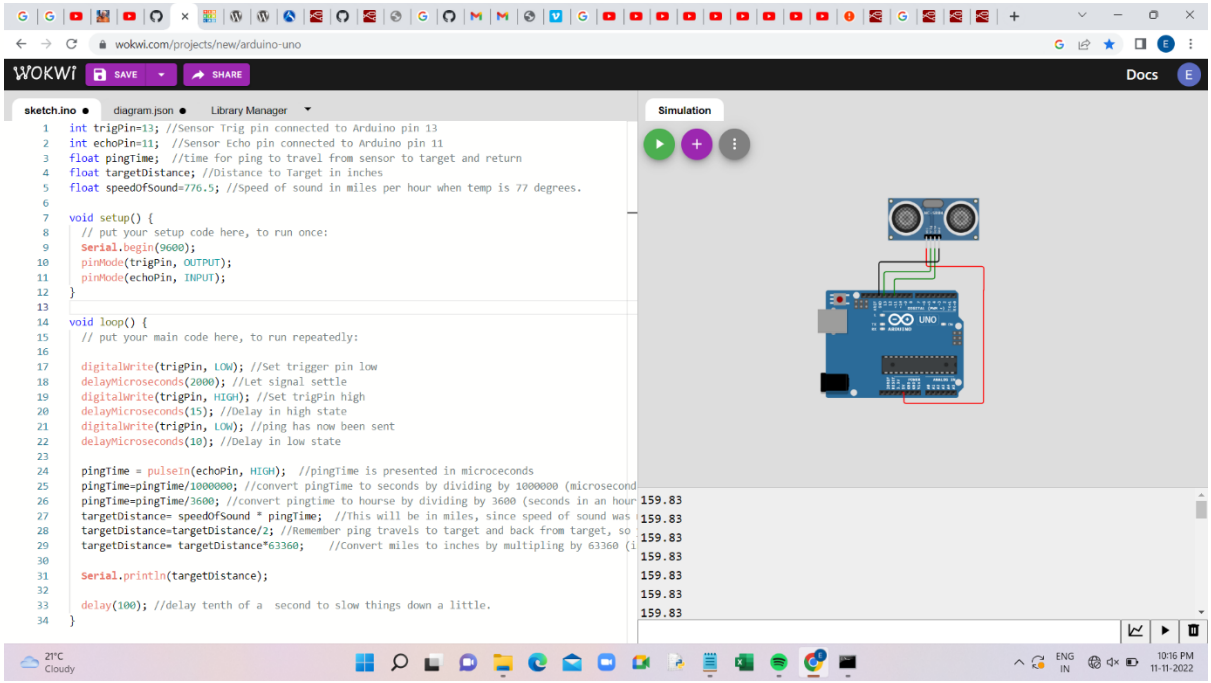
Develop a Python Script

Date	10th November 2022
Team ID	PNT2022TMID30256
Project name	Smart waste management system for metropolitan cities
Marks	



CODE:

```
int trigPin=13; //Sensor Trig pin connected to Arduino pin 13
int echoPin=11;  //Sensor Echo pin connected to Arduino pin 11
float pingTime;  //time for ping to travel from sensor to target and return
float targetDistance; //Distance to Target in inches
float speedOfSound=776.5; //Speed of sound in miles per hour when temp is 77
degrees.

void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
}

void loop() {
  // put your main code here, to run repeatedly:
```

```
  digitalWrite(trigPin, LOW); //Set trigger pin low
  delayMicroseconds(2000); //Let signal settle
  digitalWrite(trigPin, HIGH); //Set trigPin high
  delayMicroseconds(15); //Delay in high state
  digitalWrite(trigPin, LOW); //ping has now been sent
  delayMicroseconds(10); //Delay in low state

  pingTime = pulseIn(echoPin, HIGH);  //pingTime is presented in microceconds
  pingTime=pingTime/1000000; //convert pingTime to seconds by dividing by
1000000 (microseconds in a second)
  pingTime=pingTime/3600; //convert pingtime to hourse by dividing by 3600
(seconds in an hour)
  targetDistance= speedOfSound * pingTime;  //This will be in miles, since
speed of sound was miles per hour
  targetDistance=targetDistance/2; //Remember ping travels to target and back
from target, so you must divide by 2 for actual target distance.
  targetDistance= targetDistance*63360;    //Convert miles to inches by
multipling by 63360 (inches per mile)

  Serial.println(targetDistance);

  delay(100); //delay tenth of a  second to slow things down a little.
}
```