```python
import serial import time import csv import numpy as np import matplotlib.pyplot as plt ser =
serial.Serial('/COM6',9600) ser_bytes = ser.readline(10) print (ser_bytes) ser.flushInput()
while True:

 try:

 ser_bytes = ser.readline()  decoded_bytes = float(ser_bytes[0:len(ser_bytes)-2].decode("utf-

8"))  print(decoded_bytes) temp = float(decoded_bytes(1:3)) turb = float(decoded_bytes(4:6))

pH = float(decoded_bytes(6:8))  with open("test_data.csv","a") as f:  writer =

csv.writer(f,delimiter=",")  writer.writerow([time.time(),decoded_bytes])  except:

print("Keyboard Interrupt")  ser.close()  break() t = np.arange(0.0, 2.0, 0.01)


s = 1 + np.sin(2*np.pi*t) plt.plot(t, s) plt.xlabel('time (s)')

plt.ylabel('Celsisus (C)') plt.title('Temperature') plt.grid(True)

plt.savefig("Temperature.png") plt.show() Serial.begin(9600);

sensors.begin();  int sensorValue = analogRead(A1);  voltage =

sensorValue * (5.0 / 1024.0);

}
void loop(void)

{

 sensors.requestTemperatures();

 Celcius=sensors.getTempCByIndex(0);

Fahrenheit=sensors.toFahrenheit(Celcius);  for(int i=0;i<10;i++)

{

 buf[i]=analogRead(analogInPin);  delay(10);

}

for(int i=0;i<9;i++)

{

 for(int j=i+1;j<10;j++)

 {

if(buf[i]>buf[j])

{
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      temp=buf[i];  buf[i]=buf[j];  buf[j]=temp;

 }

n = 256

X = np.linspace(-np.pi, np.pi, 256, endpoint=True) C,S = np.cos(X),

np.sin(X) plt.plot(X, C) plt.plot(X,S) plt.show() print ("Visualization of

real time sensor Data.") print("/n") while True:

 try:

 ser_bytes = ser.readline()  decoded_bytes = float(ser_bytes[0:len(ser_bytes)-2].decode("utf-

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