DEVELOP A PYTHON SCRIPT

Date	3 November 2022
Team ID	PNT2022TMID54446
Project Name	Signs with Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

CODE:

```
#include <TinyGPS++.h>
#include <SoftwareSerial.h>
TinyGPSPlus gps;
SoftwareSerial ss (3,4); char
n;
int a;

void setup() {
Serial.begin(9600);
ss.begin(9600); pinMode (2,
INPUT): pinMode (6,
OUTPUT); pinMode(11,
OUTPUT); pinMode(10,
OUTPUT); pinMode (9,
OUTPUT); pinMode (12,
OUTPUT); //apr
digitalWrite(11,HIGH);
digitalWrite(6,HIGH);
attachInterrupt (digitalPinToInterrupt (2), piezo,CHANGE);
}
```

```
void loop() { n-
Serial.read(); //
Serial.println(" ");
delay (200);
if (n=='3') {
digitalWrite(6,HIGH);
digitalWrite(11,HIGH);
digitalWrite(12,HIGH);
delay(200);
digitalWrite(12,LOW); }
else if (n=='2') digitalWrite(6,LOW);
digitalWrite(11,LOW);
digitalWrite(10,LOW);
digitalWrite(9,LOW);
```

```
digitalWrite(12,HIGH); delay(200);
digitalWrite(12,LOW); }
else if (n=='1')
analogWrite(11,100);
analogWrite(6,100);
digitalWrite(12,HIGH); delay(200);
digitalWrite(12,LOW);
}
}
// while (ss.available() > 0)
// if (gps.encode(ss.read()))
// displayInfo(); void
displayInfo()
{
// Serial.print (F("Location: ")); if
(gps.location.isValid())
Serial.print(gps.location.lat(), 6);
Serial.print (F(","));
Serial.print(gps.location. Ing(), 6); } else
// Serial.print (F ("INVALID"));
Serial.print("10.305125"); Serial.print(',');
Serial.print("76.389582");
}
/* Serial.print(F(" Date/Time: "));
if (gps.date.isValid())
{
Serial.print(gps.date.month());
Serial.print (F("/"));
Serial.print(gps.date.day());
Serial.print (F("/"));
Serial.print(gps.date.year());
}
else
{
Serial.print(F("INVALID"));
}
```

```
Serial.print (F(" "));
if (gps.time.isValid())
{
if (gps.time.hour() < 10) Serial.print (F("0"));
Serial.print(gps.time.hour()); Serial.print
(F(":"));
if (gps.time.minute() < 10) Serial.print(F("0"));
Serial.print (gps.time.minute()); Serial.print
(F(":"));
if (gps.time.second() < 10) Serial.print(F("0"));
Serial.print(gps.time.second()); Serial.print
(F(".")); if (gps.time.centisecond() < 10)
 Serial.print(F("0"));
Serial.print(gps.time.centisecond());
}
```

```
else
{
// Serial.print (F("INVALID"));
}*/
Serial.println();
}
void piezo()
{
while (ss.available() > 0) if (gps.encode(ss.read()))
displayInfo();
}
int     a=0,b=0,c=0,d=0;
void setup() { pinMode
(D1, INPUT); pinMode
(D2, INPUT); pinMode
(D3, INPUT); pinMode
(D4, INPUT);
digitalWrite(D1,LOW);
digitalWrite(D2, LOW);
digitalWrite(D3, LOW);
digitalWrite(D4, LOW);
Serial.begin(9600);
}
void loop()
{
a=digitalRead(D1); if
(a==1) {
Serial.print("1"); }
b=digitalRead (D2);
if (b==1) {
Serial.print("2"); }
d=digitalRead(D4);
if (d==1)
{
Serial.print("3");
}
}
```