

## **DEVELOP A PYTHON SCRIPT**

Team ID	PNT2022TMID09823
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,HIG
H);
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,HIG
H);
digitalWrite(12,HIG
H); 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.lng(), 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,LO
W); digitalWrite(D2,
LOW);
digitalWrite(D3,
LOW);
digitalWrite(D4,
LOW);
Serial.begin(9600);
}
void loop()
{
a=digitalRead(1);
if (a==1)
{
Serial.print("1");
}
}

```

```
b=digitalRead(D
2);
if (b==1)
{
Serial.print("2");
}
d=digitalRead(4
);
if (d==1)
{
Serial.print("3");
}
}
```