## **DEVELOP A PYTHON SCRIPT**

Team ID	PNT2022TMID25209
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"));</pre>
Serial.print (gps.time.minute()); Serial.print
(F(":"));
if (gps.time.second() < 10) Serial.print(F("0"));</pre>
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");
}
}
```