Date	17 November 2022
Team ID	PNT2022TMID18146
Project Name	Project - 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);
}
}
displayInfo()
{
if(gps.location.isValid()){
Serial.print(gps.location.lat(), 6);
Serial.print (F(","));
Serial.print(gps.location. Ing(), 6); }
else{
Serial.print("10.305125");
Serial.print(',');
Serial.print("76.389582");
}
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");
}
```