

LAMPIRAN

PROGRAM PADA ARDUINO NANO

```
#include <Wire.h>
#include <Adafruit_BMP085.h>
#include "Servo.h"
#include <TinyGPS.h>
#include <SoftwareSerial.h>

Adafruit_BMP085 bmp;
Servo motor1;
float t_nol,t_sekarang,t_sebelumnya;
long w_sekarang,w_sebelumnya;
TinyGPS gps;
SoftwareSerial ss(10,11);//rx,tx
int tinggi;
int a;
void setup() {
  Serial.begin(9600);
  ss.begin(9600);
  motor1.attach(5);
  delay(1000);
  if (!bmp.begin()) {
    while (1) {}
  }

  pinMode(A0, OUTPUT);
  pinMode(A2,OUTPUT);
  t_nol=bmp.readAltitude(101500);
  delay(1000);
  digitalWrite(A0,1);
  //digitalWrite(A2,0);
}

void loop() {
  ss.listen();
  sensorbmp ();
  // delay(2000);
  // for(a = 100; a > 0; a--){
  // t_sekarang=a;
  // sensorbmp ();
```

```

// delay(50);
//}
}

void sensorbmp(){
  t_sekarang=bmp.readAltitude(101500);
  w_sekarang=millis();
  if(w_sekarang-w_sebelumnya >= 100){
    w_sebelumnya=w_sekarang;
    if(t_sebelumnya-t_sekarang >=1){
      //if((t_sebelumnya-t_sekarang >=1)&& (t_sekarang-t_nol >=8)){
      digitalWrite(A0,0);
      digitalWrite(A2,1);
      motor1.write(0);
      while(1){
        SendMessage();
        delay(5000);
      }
    }
    t_sebelumnya=t_sekarang;
  }
}

void carigps(){
  ss.listen();
  bool newData = false;
  unsigned long chars;
  unsigned short sentences, failed;

  for (unsigned long start = millis(); millis() - start < 1000;)
  {
    while (ss.available())
    {
      char c = ss.read();
      if (gps.encode(c))
        newData = true;
    }
  }

  if (newData)

```

```

{
  float flat, flon;
  unsigned long age;
  gps.f_get_position(&flat, &flon, &age);
  Serial.print("LAT=");
  Serial.print(flat == TinyGPS::GPS_INVALID_F_ANGLE ? 0.0 : flat, 6);
  Serial.print(" LON=");
  Serial.print(flon == TinyGPS::GPS_INVALID_F_ANGLE ? 0.0 : flon, 6);
}

gps.stats(&chars, &sentences, &failed);
}

void SendMessage()
{
  float flat, flon;
  gps.f_get_position(&flat, &flon);
  Serial.println("AT+CMGF=1");
  delay(1000);
  Serial.println("AT+CMGS=\"085707174300\"\\r");
  delay(1000);
  Serial.println("The Location");
  carigps ();
  delay(100);
  Serial.println((char)26); // ASCII code of CTRL+Z
  delay(1000);
}

```

PROGRAM PADA ARDUINO UNO

```
#include "Servo.h"
```

```
const int buttonPin = A0;
```

```
int buttonState = 0;
```

```
const int ledPin = 13;
```

```
Servo motor1;
```

```
void setup() {
```

```
  motor1.attach(11);
```

```
  pinMode(13, OUTPUT);
```

```
  pinMode(buttonPin, INPUT);
```

```
}
```

```
void loop() {
```

```
  buttonState = digitalRead(buttonPin);
```

```
  if (buttonState == HIGH) {
```

```
    digitalWrite(ledPin, HIGH);
```

```
    motor1.write(0);
```

```
  }
```

```
}
```