

#program code

```
#include <Wire.h>
```

```
#include <Adafruit_GFX.h>
```

```
#include <Adafruit_SSD1306.h>
```

```
#define SCREEN_WIDTH 128
```

```
#define SCREEN_HEIGHT 64
```

```
Adafruit_SSD1306 display(SCREEN_WIDTH, SCREEN_HEIGHT, &Wire, -1);
```

```
#define volt A0
```

```
float Vo = 0.0, Vi = 0.0, R1 = 30000.0, R2 = 7500.0, percentage = 0.0;
```

```
int val = 0;
```

```
void setup() {
```

```
  pinMode(volt, INPUT);
```

```
  Serial.begin(9600);
```

```
  if (!display.begin(SSD1306_SWITCHCAPVCC, 0x3C)) {
```

```
    Serial.println(F("SSD1306 allocation failed"));
```

```
    for (;;) 
```

```
      ;
```

```
  }
```

```
  delay(2000);
```

```
  display.clearDisplay();
```

```
  display.setTextSize(2);
```

```
  display.setTextColor(WHITE);
```

```
  display.setCursor(0, 10);
```

```
  // Display static text
```

```
  display.println("EV CHARGE");
```

```
  display.println("Voltage");
```

```
  display.println("Monitoring");
```

```
display.display();  
delay(5000);  
display.clearDisplay();  
}
```

```
void loop() {  
  val = analogRead(volt);  
  Vo = (val * 5.0) / 1023.0;  
  Vi = Vo / (R2 / (R1 + R2));  
  display.clearDisplay();  
  
  display.setTextSize(2);  
  display.setTextColor(WHITE);  
  display.setCursor(0, 10);  
  // Display static text  
  display.println(Vi);  
  display.println("volts");  
  display.display();  
  delay(3000);  
}
```