```
void setup() {

        Serial.begin(9600);


}


void loop() {

        unsigned long currentMillis = millis();

        unsigned long oldMillis = 0;

        int interval = 500;

        int SampleFromADC;


        if (currentMillis - oldMillis >= interval) {

                SampleFromADC = analogRead(0);

         analogWrite (10, SampleFromADC/4);

         Serial.print(SampleFromADC);

         Serial.print( " = " );

        Serial.print( 4.0 * SampleFromADC / 1024.0, 4 );

         Serial.println( " volts " );

        oldMillis + interval;


        }
}
```