// Date and time functions using a DS1307 RTC connected via I2C and Wire lib

#include <Wire.h>

#include "RTClib.h"

RTC\_DS1307 RTC;

void setup () {

    Serial.begin(57600);

    Wire.begin();

    RTC.begin();

  if (! RTC.isrunning()) {

    Serial.println("RTC is NOT running!");

    // following line sets the RTC to the date & time this sketch was compiled

    RTC.adjust(DateTime(\_\_DATE\_\_, \_\_TIME\_\_));

  }

}

void loop () {

    DateTime now = RTC.now();

    Serial.print(now.year(), DEC);

    Serial.print('/');

    Serial.print(now.month(), DEC);

    Serial.print('/');

    Serial.print(now.day(), DEC);

    Serial.print(' ');

    Serial.print(now.hour(), DEC);

    Serial.print(':');

    Serial.print(now.minute(), DEC);

    Serial.print(':');

    Serial.print(now.second(), DEC);

    Serial.println();

    Serial.print(" since midnight 1/1/1970 = ");

    Serial.print(now.unixtime());

    Serial.print("s = ");

    Serial.print(now.unixtime() / 86400L);

    Serial.println("d");

    // calculate a date which is 7 days and 30 seconds into the future

    DateTime future (now.unixtime() + 7 \* 86400L + 30);

    Serial.print(" now + 7d + 30s: ");

    Serial.print(future.year(), DEC);

    Serial.print('/');

    Serial.print(future.month(), DEC);

    Serial.print('/');

    Serial.print(future.day(), DEC);

    Serial.print(' ');

    Serial.print(future.hour(), DEC);

    Serial.print(':');

    Serial.print(future.minute(), DEC);

    Serial.print(':');

    Serial.print(future.second(), DEC);

    Serial.println();

    Serial.println();

    delay(3000);

}