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

static DS1307 RTC;
#include "SevSeg.h"
SevSeg sevseg; //Instantiate a seven segment controller object

unsigned long bth = 0, btm = 0, bty = 0, btmo = 0, btd = 0, timer = millis();
int hrs_plus , min_plus , day_plus , mon_plus , yrs_plus ;
String hr, mi, dy, mo, yr;

String SDIGIT;

void setup() {
  RTC.begin();

  byte numDigits = 8;
  byte digitPins[] = {11, 10, 9, 8, 12, 13, A0, A1};
  byte segmentPins[] = {1, 2, 5, 6, 3, 4, 7, 0};
  bool resistorsOnSegments = false; // 'false' means resistors are on digit pins
  byte hardwareConfig = COMMON_CATHODE; // See README.md for options
  bool updateWithDelays = false; // Default 'false' is Recommended
  bool leadingZeros = false; // Use 'true' if you'd like to keep the leading zeros
  bool disableDecPoint = true; // Use 'true' if your decimal point doesn't exist or
isn't connected

  sevseg.begin(hardwareConfig, numDigits, digitPins, segmentPins,
resistorsOnSegments,
               updateWithDelays, leadingZeros, disableDecPoint);
 sevseg.setBrightness(90);

  pinMode(hrs_plus, INPUT);
  pinMode(min_plus, INPUT);
  pinMode(day_plus, INPUT);
  pinMode(mon_plus, INPUT);
  pinMode(yrs_plus, INPUT);



}

void loop() {

  if (millis() > timer) {
    timer = millis() + 1000;
    getAndDisplay();
  }
```

```
 sevseg.refreshDisplay();
  //
  //  if (digitalRead(hrs_plus) == HIGH && millis() < bth) {
  //    bth = millis() + 500;
  //    GetDateStuff(Year, Month, Date, Hour, Minute);
  //    clock.setHour(Hour);
  //  }
  //  if (digitalRead(min_plus) == HIGH && millis() < btm) {
  //    btm = millis() + 500;
  //    GetDateStuff(Year, Month, Date, Hour, Minute);
  //    clock.setMinute(Minute);
  //  }
  //  if (digitalRead(day_plus) == HIGH && millis() < btd) {
  //    btd = millis() + 500;
  //    GetDateStuff(Year, Month, Date, Hour, Minute);
  //    clock.setDate(Date);
  //  }
  //  if (digitalRead(mon_plus) == HIGH && millis() < btmo) {
  //    btmo = millis() + 500;
  //    GetDateStuff(Year, Month, Date, Hour, Minute);
  //    clock.setMonth(Month);
  //  }
  //  if (digitalRead(yrs_plus) == HIGH && millis() < bty) {
  //    bty = millis() + 500;
  //    GetDateStuff(Year, Month, Date, Hour, Minute);
  //    clock.setYear(Year);
  //  }
}


void getAndDisplay() {
  hr = String (RTC.getHours());
  mi = String (RTC.getMinutes());
  dy = String (RTC.getDay());
  mo = String (RTC.getMonth());
  yr = String (RTC.getYear());
  String yyr = yr.substring (2, 3);
  String yyr2 = yr.substring (3, 4);
  yr = yyr + yyr2;
  if (hr == "0") {
    hr = "00";
  }
  else if (hr.toInt() < 10) {
    hr = "0" + hr;
  }
  if (mi == "0") {
```

```
    mi = "00";
  }
  else if (mi.toInt() < 10) {
    mi = "0" + mi;
  }
  if (dy == "0") {
    dy = "00";
  }
  else if (dy.toInt() < 10) {
    dy = "0" + dy;
  }
  if (mo == "0") {
    mo = "00";
  }
  else if (mo.toInt() < 10) {
    mo = "0" + mo;
  }
  if (yr == "0") {
    yr = "00";
  }
  SDIGIT = hr + mi + dy + mo;
 sevseg.setNumber(SDIGIT.toInt());
}
```