

```

#include <DMD.h>
#include <TimerOne.h>
#include <Wire.h>
#include <Sodaq_DS3231.h>
#include "PrayerTimes.h"
#include <SystemFont5x7.h>
#include <angka6x13.h>
#include <Font3x5.h>
#include <angka_2.h>
#include <huruf_kecilku.h>
#include <SPI.h>

char weekDay[][7] = {"SENIN" , "SELASA", "RABU", "KAMIS", "JUM'AT",
"SABTU", "MINGGU"};
int langkah;
int lama_tampilnya;
boolean Waduh_Setting = false;

#define Jam_bUP A1
#define tombol_bOK A2
#define Jam_bDN A3
DMD dmd(2, 1); //untuk mengatur jumlah panel yang kamu pakai

double times[sizeof(TimeName) / sizeof(char*)];
void ScanDMD(){
dmd.scanDisplayBySPI();}

void setup(){
  Serial.begin(9600);
  pinMode(2, OUTPUT);
  pinMode(3, OUTPUT);
  digitalWrite(3,HIGH);
  langkah = 0;
  rtc.begin();
  Wire.begin();
  Timer1.initialize(500);
  Timer1.attachInterrupt(ScanDMD);
  dmd.clearScreen(true);

  pinMode(tombol_bOK, INPUT_PULLUP);
  pinMode(Jam_bUP, INPUT_PULLUP);
  pinMode(Jam_bDN, INPUT_PULLUP);
  attachInterrupt(0, Setting, FALLING);}

void loop() {
if (Waduh_Setting) {MenuSetting();}mulai();}
void Setting() {

```



```

if (thn >= 9999) {
thn = 0;}

while (digitalRead(Jam_bUP) == LOW) {}
if (digitalRead(Jam_bDN) == LOW) { // Tombol Setting thn
delay(10); thn--; // Delay Tombol & Tambah Nilai thn
if (thn <= 0) {
thn = 0;}
while (digitalRead(Jam_bDN) == LOW) {}

setHari: // Setting Times hari
if (digitalRead(Jam_bUP) == LOW ) { // Tombol Setting hari
harin_e = harin_e;
delay(10);
harin_e++; // Delay Tombol & Tambah Nilai hari,
if (harin_e >= 7) {
harin_e = 0;}

while (digitalRead(Jam_bUP) == LOW) {}
if (digitalRead(Jam_bDN) == LOW) { // Tombol Setting hari
harin_e = harin_e;
delay(10);
harin_e--;

if (harin_e <= 0) {
harin_e = 0;}
while (digitalRead(Jam_bDN) == LOW) {}

if (digitalRead(tombol_bOK) == LOW) { // Tombol Selesai
Setting
kasus = kasus + 1;
dmd.clearScreen(true); // Hapus Tampilan
P10
DateTime dt(thn, bln, tgl, jame, menit_e, now.second(), harin_e);
rtc.setDateTime(dt);
while (digitalRead(tombol_bOK) == LOW) {
delay(500);}

if (kasus == 1) {
dmd.clearScreen(true);
dmd.selectFont(SystemFont5x7);
dmd.drawString(0, 0, "set-J", 5, 0);
String xjam = Konversi(jame) + ":" + Konversi(menit_e) ;
int pjg = xjam.length() + 1;
char sjam[pjg];
xjam.toCharArray(sjam, pjg);
dmd.drawString(0, 9, sjam, pjg, 0);
delay (100);

```

```

goto setTimes;}

if (kasus == 2) {
    dmd.clearScreen(true);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(0, 0, "Tgl", 3, 0);
    String xjam = Konversi(tgl) + "/" + Konversi(bln) ;
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 9, sjam, pjg, 0);
    delay (100);
    goto setTgl;}

if (kasus == 3) {
    dmd.clearScreen(true);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(0, 0, "Thn", 3, 0);
    String xjam = Konversi(thn) ;
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 9, sjam, pjg, 0);
    delay (100);
    goto setThn;}

if (kasus == 4) {
    dmd.clearScreen(true);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(0, 0, "Hari", 4, 0);
    String xjam = Konversi(harin_e) ;

    if (harin_e == 0) {
        xjam = "SEN";
        int pjg = xjam.length() + 1;
        char sjam[pjg];
        xjam.toCharArray(sjam, pjg);
        dmd.drawString(0, 9, sjam, pjg, 0);}

    if (harin_e == 1) {
        xjam = "SEL";
        int pjg = xjam.length() + 1;
        char sjam[pjg];
        xjam.toCharArray(sjam, pjg);
        dmd.drawString(0, 9, sjam, pjg, 0);}

    if (harin_e == 2) {
        xjam = "RAB";

```

```

int pjg = xjam.length() + 1;
char sjam[pjg];
xjam.toCharArray(sjam, pjg);
dmd.drawString(0, 9, sjam, pjg, 0);}

if (harin_e == 3) {
    xjam = "KAM";
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 9, sjam, pjg, 0);}

if (harin_e == 4) {
    xjam = "JUM";
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 9, sjam, pjg, 0);}

if (harin_e == 5) {
    xjam = "SAB";
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 9, sjam, pjg, 0);}

if (harin_e == 6) {
    xjam = "MIN";
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 9, sjam, pjg, 0);}
delay (100);
goto setHari;}

if (kasus == 5) {
    dmd.clearScreen(true);
    goto endSetting;
    delay(500);}

endSetting:
attachInterrupt(0, Setting, FALLING);
Waduh_Setting = false;
kasus = 0;}

int menite = 1;
void mulai(){
    dmd.clearScreen( true );

```

```

long mulai = millis();
while (millis() - mulai < 10000) {
DateTime now = rtc.now();
String Teks;
double lintang = -5.26; //Latitude
double bujur = 105.14; //Longitude
int Z = 7 ;           //Zona Waktu GMT WIB biasanya 7

int tgl = now.date();    //Tanggal
int bln = now.month();  //Bulan
int thn = now.year();   //Tahun
int hours, minutes;    //jam sholat dan menit sholat

long mulai = millis();
set_calc_method(ISNA);    //Methode perhitungan mengikuti ISNA
set_asr_method(Shafii);  //Pendapat Imam Syafi'i
set_high_lats_adjust_method(AngleBased);
set_fajr_angle(20);      //Sudut Waktu Subuh
set_isha_angle(18);     ///Sudut Waktu Isya
get_prayer_times(thn, bln, tgl, lintang, bujur, Z, times);

    ///jam--besar///
    dmd.clearScreen( true );
    dmd.selectFont(angka6x13);
    int menit_e = now.minute();
    int jame = now.hour();
    int detik_e = now.second();
    String xjam = Konversi(jame) ;
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(0, 0, sjam, pjg, 0);

    ////menit///
    String xxjam = Konversi(menit_e) ; //tampilan menit
    int xpjg = xxjam.length() + 1;
    char xsjam[xpjg];
    xxjam.toCharArray(xsjam, xpjg);
    dmd.drawString(17, 0, xsjam, xpjg, 0);

    dmd.selectFont(SystemFont5x7);
    dmd.drawChar( 13, 4, ':', GRAPHICS_NOR );
    delay( 100 );
    dmd.drawChar( 13, 4, ':', GRAPHICS_OR );
    delay( 100 );

    ///subuh
    get_float_time_parts(times[0], hours, minutes);

```

```

Teks = "Subuh ";
char pj = Teks.length() + 1;
char tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 0, tampil, pj, 0); //koordinat tampilan
Teks = Konversi(hours) + ":" + Konversi(minutes); //baris kedua
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 9, tampil, pj, 0); //koordinat tampilan
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );

get_float_time_parts(times[2], hours, minutes);
Teks = "Zuhur "; //baris atas
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 0, tampil, pj, 0); //koordinat tampilan
Teks = Konversi(hours) + ":" + Konversi(minutes); //baris kedua
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 9, tampil, pj, 0); //koordinat tampilan
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );

get_float_time_parts(times[3], hours, minutes);
Teks = "Ashar "; //baris atas
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 0, tampil, pj, 0); //koordinat tampilan
Teks = Konversi(hours) + ":" + Konversi(minutes); //baris kedua
pj = Teks.length() + 1;

```

```
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 9, tampil, pj, 0); //koordinat tampilan
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );
```

```
get_float_time_parts(times[4], hours, minutes);
Teks = "Mgrib "; //baris atas
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 0, tampil, pj, 0); //koordinat tampilan
Teks = Konversi(hours) + ":" + Konversi(minutes); //baris kedua
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 9, tampil, pj, 0); //koordinat tampilan
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );
```

```
get_float_time_parts(times[6], hours, minutes);
Teks = "Isya' "; //baris atas
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 0, tampil, pj, 0); //koordinat tampilan
Teks = Konversi(hours) + ":" + Konversi(minutes); //baris kedua
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 9, tampil, pj, 0); //koordinat tampilan
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );
```

```
get_float_time_parts(times[0], hours, minutes);
if (minutes < 11){
    minutes = 60 - minutes;
```



```

    hours --;}else {
    minutes = minutes - 10 ;}

Teks = "Imsak ";
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 0, tampil, pj, 0); //koordinat tampilan

Teks = Konversi(hours) + ":" + Konversi(minutes);           //baris kedua
pj = Teks.length() + 1;
tampil[pj];
Teks.toCharArray(tampil, pj);

dmd.selectFont(SystemFont5x7);
dmd.drawString(34, 9, tampil, pj, 0); //koordinat tampilan
dmd.drawChar( 13, 4, ':', GRAPHICS_NOR ); // clock colon overlay on
delay( 1000 );
dmd.drawChar( 13, 4, ':', GRAPHICS_OR ); // clock colon overlay off
delay( 1000 );

///TOMBOL SET JAM//
if (digitalRead(tombol_bOK) == LOW) {
    MenuSetting();}

dmd.clearScreen( true );
while (millis() - mulai < 20000) {
    DateTime now = rtc.now();
    String Teks;
    int tgl = now.date(); //Tanggal
    int bln = now.month(); //Bulan
    int thn = now.year(); //Tahun
    // int hours, minutes; //jam dan menit jawdwal sholat
    int jame = now.hour(); //jam
    int menit_e = now.minute(); //menit
    int detik_e = now.second(); //detik
    int harin_e = harin_e; //hari
    delay(100);
    detachInterrupt(0); // Matikan interrupt "0"

    dmd.selectFont(angka_2);
    String hariku = Konversi(now.hour()) + ":" + Konversi(now.minute()) ;
    int dowo = hariku.length() + 1;
    char detikanku[dowo];
    hariku.toCharArray(detikanku, dowo);
    dmd.drawString(17, 0, detikanku, dowo, 0);

```

```

Teks = "TANGGAL " + Konversi(now.date()) + "-" + Konversi(now.month()) + "-"
" + Konversi(now.year()) + " MASJID BAITUL ILMI IIB DARMAJAYA
LAMPUNG      HP MOHON DI NON AKTIFKAN" ; //tampilkan hari
int kecepatan;
kecepatan = 45; //kecepatan runing teks
int pj = Teks.length() + 1;
char tampil[pj];
Teks.toCharArray(tampil, pj);
dmd.selectFont(SystemFont5x7);
dmd.drawMarquee(tampil, pj, 64, 9);

long timer = millis();
boolean ret = false;
while (!ret) {
    if ((timer + kecepatan) < millis()) {
        ret = dmd.stepSplitMarquee(8, 15, 0); //dianimasikan baris 8 sampai 15, sampai
kolom 0
        timer = millis();
    }

    //TOMBOL SET JAM//
    if (digitalRead(tombol_bOK) == LOW) {
        MenuSetting();}}}}

int hours;
int minutes;
dmd.clearScreen( true );
while (millis() - mulai < 50000) {

    DateTime now = rtc.now();
    String hariku = Konversi(now.date()) + "/" + Konversi(now.month()) + "/" +
Konversi(now.year()) + " "; //tampilan tanggal
    int dowo = hariku.length() + 1;
    char detikanku[dowo];
    hariku.toCharArray(detikanku, dowo);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(2, 9, detikanku, dowo, 0);
    String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.selectFont(angka_2);
    dmd.drawString(8, 0, sjam, pjg, 0);

    if (digitalRead(tombol_bOK) == LOW) {
        MenuSetting();}

    get_float_time_parts(times[0], hours, minutes);

```

```

if ((now.hour() == hours && now.minute() == minutes -10) || (now.hour() ==
hours && now.minute() == minutes - 9)
|| (now.hour() == hours && now.minute() == minutes - 8)|| (now.hour() == hours
&& now.minute() == minutes - 7)) {

```

```

dmd.clearScreen( true );
digitalWrite(3, LOW);//alarm sholat
dmd.selectFont(SystemFont5x7);
dmd.drawString(5, 0, "MENJELANG", 9, 0); //koordinat tampilan
dmd.selectFont(SystemFont5x7);
dmd.drawString(17, 9, "ADZAN", 5, 0); //koordinat tampilan
delay(600000);
digitalWrite(3, HIGH);

```

```

digitalWrite(2, HIGH);//alarm sholat
delay(1000);
digitalWrite(2, LOW);//alarm sholat
delay(1000);
digitalWrite(2, HIGH);//alarm sholat
delay(1000);
digitalWrite(2, LOW);//alarm sholat
delay(1000);

```

```

dmd.clearScreen( true );
dmd.selectFont(SystemFont5x7);
dmd.drawString(17, 0, "Adzan ", 5, 0); //koordinat tampilan
dmd.selectFont(SystemFont5x7);
dmd.drawString(17, 9, "Subuh", 5, 0); //koordinat tampilan
delay(150000);

```

```

//iqomah-----
int langkah;
int waktu_iqomah;
int panjang_iqomah;
int iqomah;
dmd.clearScreen( true );

```

```

dmd.selectFont(SystemFont5x7);

```

```

dmd.clearScreen( true );
dmd.drawString(15, 0, "IQOMAH", 6, 0); //koordinat tampilan
int tampil;
int detik = 60, menit = 9;
for (detik = 60; detik >= 0; detik--) {
    delay(1000);
    String iqomah = Konversi(menit) + ":" + Konversi(detik);
    int panjang_iqomah = iqomah.length() + 1;
    char waktu_iqomah[panjang_iqomah];

```

```

iqomah.toCharArray(waktu_iqomah, panjang_iqomah);
dmd.drawString(18, 9, waktu_iqomah, panjang_iqomah, 0);
if (detik <= 0) {
    detik = 60;
    menit = menit - 1;}

    if (menit <= 0 && detik <= 1) {
    for (tampil = 0; tampil < 300 ; tampil++) {
        menit = 0;
        detik = 0;
        dmd.clearScreen( true );

        dmd.drawString(15, 0, "SHOLAT", 6, 0);
        now = rtc.now();
        String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
        int pjpg = xjam.length() + 1;
        char sjam[pjpg];
        xjam.toCharArray(sjam, pjpg);
        dmd.drawString(7, 9, sjam, pjpg, 0);
        delay (1000);}}}}}}

dmd.clearScreen( true );
while (millis() - mulai < 55000) {
    DateTime now = rtc.now();

    String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
    int pjpg = xjam.length() + 1;
    char sjam[pjpg];
    xjam.toCharArray(sjam, pjpg);
    dmd.selectFont(angka_2);
    dmd.drawString(8, 0, sjam, pjpg, 0);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 9, (weekDay[now.dayOfWeek()]), 7, 0);

    if (digitalRead(tombol_bOK) == LOW) {
        MenuSetting();}

    int harin_e = now.dayOfWeek();
    get_float_time_parts(times[2], hours, minutes);
    if ((now.hour() == hours && now.minute() == minutes - 10 && harin_e != 4) ||
(now.hour() == hours && now.minute() == minutes - 9 && harin_e != 4) ||
(now.hour() == hours && now.minute() == minutes - 8 && harin_e != 4)
    ) {
        dmd.clearScreen( true );
        digitalWrite(3, LOW); //alarm sholat
        dmd.selectFont(SystemFont5x7);

```

```
dmd.drawString(5, 0, "MENJELANG", 9, 0); //koordinat tampilan
dmd.selectFont(SystemFont5x7);
dmd.drawString(17, 9, "ADZAN", 5, 0); //koordinat tampilan
delay(600000);
digitalWrite(3, HIGH);
```

```
digitalWrite(2, HIGH); //alarm sholat
delay(1000);
digitalWrite(2, LOW); //alarm sholat
delay(1000);
digitalWrite(2, HIGH); //alarm sholat
delay(1000);
digitalWrite(2, LOW); //alarm sholat
delay(1000);
```

```
dmd.clearScreen( true );
dmd.selectFont(SystemFont5x7);
dmd.drawString(17, 0, "Adzan ", 5, 0); //koordinat tampilan
dmd.selectFont(SystemFont5x7);
dmd.drawString(15, 9, "Dzuhur", 6, 0); //koordinat tampilan
delay(100000);
```

```
int langkah;
int waktu_iqomah;
int panjang_iqomah;
int iqomah;
dmd.clearScreen( true );
```

```
dmd.selectFont(SystemFont5x7);
dmd.clearScreen( true );
dmd.drawString(15, 0, "IQOMAH", 6, 0); //koordinat tampilan
int tampil;
int detik = 60, menit = 9;
for (detik = 60; detik >= 0; detik--) {
    delay(1000);
    String iqomah = Konversi(menit) + ":" + Konversi(detik);
    int panjang_iqomah = iqomah.length() + 1;
    char waktu_iqomah[panjang_iqomah];
    iqomah.toCharArray(waktu_iqomah, panjang_iqomah);
    dmd.drawString(18, 9, waktu_iqomah, panjang_iqomah, 0);
    if (detik <= 0) {
        detik = 60;
        menit = menit - 1;
    }
    if (menit <= 0 && detik <= 1) {
        for (tampil = 0; tampil < 300 ; tampil++) {
            menit = 0;
            detik = 0;
            dmd.clearScreen( true );
```

```

    dmd.drawString(15, 0, "SHOLAT", 6, 0);
    now = rtc.now();
    String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
    int pjpg = xjam.length() + 1;
    char sjam[pjpg];
    xjam.toCharArray(sjam, pjpg);
    dmd.drawString(7, 9, sjam, pjpg, 0);
    delay (1000);}}}}}}

dmd.clearScreen( true );
while (millis() - mulai < 60000) {
    DateTime now = rtc.now();
    String hariku = Konversi(now.date()) + "/" + Konversi(now.month()) + "/" +
Konversi(now.year()) + " "; //tampilan tanggal
    int dowo = hariku.length() + 1;
    char detikanku[dowo];
    hariku.toCharArray(detikanku, dowo);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(2, 9, detikanku, dowo, 0);
    String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
    int pjpg = xjam.length() + 1;
    char sjam[pjpg];
    xjam.toCharArray(sjam, pjpg);
    dmd.selectFont(angka_2);
    dmd.drawString(8, 0, sjam, pjpg, 0);

    ////////////interupsi tombol menu-----
    if (digitalRead(tombol_bOK) == LOW) {
        MenuSetting();}

    int harin_e = now.dayOfWeek();
    get_float_time_parts(times[2], hours, minutes);
    if ((now.hour() == hours && now.minute() == minutes && harin_e == 4) ||
(now.hour() == hours && now.minute() == minutes + 1 && harin_e == 4)
|| (now.hour() == hours && now.minute() == minutes + 2 && harin_e == 4)
|| (now.hour() == hours && now.minute() == minutes + 3 && harin_e == 4)
|| (now.hour() == hours && now.minute() == minutes + 4 && harin_e == 4)
|| (now.hour() == hours && now.minute() == minutes + 5 && harin_e == 4)) {

    int tampil;
    dmd.clearScreen( true );
    for (tampil = 0; tampil < 1550 ; tampil++) {

        now = rtc.now();

```

```

    String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.drawString(7, 4, sjam, pjg, 0);
    delay (1000);}}

```

```

dmd.clearScreen( true );
while (millis() - mulai < 65000) {
    DateTime now = rtc.now();
    String xjam = Konversi(now.hour()) + ";" + Konversi(now.minute()) + ";" +
Konversi(now.second()); //tampilan jam
    int pjg = xjam.length() + 1;
    char sjam[pjg];
    xjam.toCharArray(sjam, pjg);
    dmd.selectFont(angka_2);
    dmd.drawString(8, 0, sjam, pjg, 0);
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 9, (weekDay[now.dayOfWeek()]), 7, 0);

```

```

if (digitalRead(tombol_bOK) == LOW) {
    MenuSetting();}

get_float_time_parts(times[3], hours, minutes);
if ((now.hour() == hours && now.minute() == minutes -5 ) || (now.hour() ==
hours && now.minute() == minutes -4)
|| (now.hour() == hours && now.minute() == minutes - 3)) {
    dmd.clearScreen( true );
    digitalWrite(3, LOW);//alarm sholat
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(5, 0, "MENJELANG", 9, 0); //koordinat tampilan
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 9, "ADZAN", 5, 0); //koordinat tampilan
    delay(300000);
    digitalWrite(3, HIGH);

    digitalWrite(2, HIGH);//alarm sholat
    delay(1000);
    digitalWrite(2, LOW);//alarm sholat
    delay(1000);
    digitalWrite(2, HIGH);//alarm sholat
    delay(1000);
    digitalWrite(2, LOW);//alarm sholat
    delay(1000);

    dmd.clearScreen( true );
    dmd.selectFont(SystemFont5x7);

```

```

dmd.drawString(17, 0, "Adzan ", 5, 0); //koordinat tampilan
dmd.selectFont(SystemFont5x7);
dmd.drawString(19, 9, "Ashar", 5, 0); //koordinat tampilan
delay(150000);

//iqomah-----
int langkah;
int waktu_iqomah;
int panjang_iqomah;
int iqomah;
dmd.clearScreen( true );

dmd.selectFont(SystemFont5x7);
dmd.clearScreen( true );
dmd.drawString(15, 0, "IQOMAH", 6, 0); //koordinat tampilan
int tampil;
int detik = 60, menit = 6;
for (detik = 60; detik >= 0; detik--) {
    delay(1000);
    String iqomah = Konversi(menit) + ":" + Konversi(detik);
    int panjang_iqomah = iqomah.length() + 1;
    char waktu_iqomah[panjang_iqomah];
    iqomah.toCharArray(waktu_iqomah, panjang_iqomah);
    dmd.drawString(18, 9, waktu_iqomah, panjang_iqomah, 0);
    if (detik <= 0) {
        detik = 60;
        menit = menit - 1;}

    if (menit <= 0 && detik <= 1) {
        for (tampil = 0; tampil < 300 ; tampil++) {
            menit = 0;
            detik = 0;
            dmd.clearScreen( true );
            dmd.drawString(15, 0, "SHOLAT", 6, 0);
            now = rtc.now();
            String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
            int pjg = xjam.length() + 1;
            char sjam[pjg];
            xjam.toCharArray(sjam, pjg);
            dmd.drawString(7, 9, sjam, pjg, 0);
            delay (1000);}}}}

dmd.clearScreen( true );
while (millis() - mulai < 70000) {
    DateTime now = rtc.now();

```



```

String hariku = Konversi(now.date()) + "/" + Konversi(now.month()) + "/" +
Konversi(now.year()) + " "; //tampilan tanggal
int dowo = hariku.length() + 1;
char detikanku[dowo];
hariku.toCharArray(detikanku, dowo);
dmd.selectFont(SystemFont5x7);
dmd.drawString(2, 9, detikanku, dowo, 0);
String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
int pjg = xjam.length() + 1;
char sjam[pjg];
xjam.toCharArray(sjam, pjg);
dmd.selectFont(angka_2);
dmd.drawString(8, 0, sjam, pjg, 0);

if (digitalRead(tombol_bOK) == LOW) {
    MenuSetting(); }

get_float_time_parts(times[4], hours, minutes);
if ((now.hour() == hours && now.minute() == minutes - 10) || (now.hour() ==
hours && now.minute() == minutes - 9)
|| (now.hour() == hours && now.minute() == minutes - 8)) {

    dmd.clearScreen( true );
    digitalWrite(3, LOW);//alarm sholat
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(5, 0, "MENJELANG", 15, 0); //koordinat tampilan
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 9, "ADZAN", 9, 0); //koordinat tampilan
    delay(600000);
    digitalWrite(3, HIGH);

    digitalWrite(2, HIGH);//alarm sholat
    delay(1000);
    digitalWrite(2, LOW);//alarm sholat
    delay(1000);
    digitalWrite(2, HIGH);//alarm sholat
    delay(1000);
    digitalWrite(2, LOW);//alarm sholat
    delay(1000);

    dmd.clearScreen( true );
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 0, "Adzan ", 5, 0); //koordinat tampilan
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(15, 9, "Maghrib", 7, 0); //koordinat tampilan
    delay(150000);

```

```

int langkah;
int waktu_iqomah;
int panjang_iqomah;
int iqomah;
dmd.clearScreen( true );

dmd.selectFont(SystemFont5x7);
dmd.clearScreen( true );
dmd.drawString(15, 0, "IQOMAH", 6, 0); //koordinat tampilan
int tampil;
int detik = 60, menit = 4;
for (detik = 60; detik >= 0; detik--) {
    delay(1000);
    String iqomah = Konversi(menit) + ":" + Konversi(detik);
    int panjang_iqomah = iqomah.length() + 1;
    char waktu_iqomah[panjang_iqomah];
    iqomah.toCharArray(waktu_iqomah, panjang_iqomah);
    dmd.drawString(18, 9, waktu_iqomah, panjang_iqomah, 0);
    if (detik <= 0) {
        detik = 60;
        menit = menit - 1;}

    if (menit <= 0 && detik <= 1) {
        for (tampil = 0; tampil < 300 ; tampil++) {
            menit = 0;
            detik = 0;
            dmd.clearScreen( true );
            dmd.drawString(15, 0, "SHOLAT", 6, 0);
            now = rtc.now();
            String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
            int pjpg = xjam.length() + 1;
            char sjam[pjpg];
            xjam.toCharArray(sjam, pjpg);
            dmd.drawString(7, 9, sjam, pjpg, 0);
            delay (1000);}}}}

dmd.clearScreen( true );
while (millis() - mulai < 75000) {
    DateTime now = rtc.now();

    String xjam = Konversi(now.hour()) + ";" + Konversi(now.minute()) + ";" +
Konversi(now.second()); //tampilan jam
    int pjpg = xjam.length() + 1;
    char sjam[pjpg];
    xjam.toCharArray(sjam, pjpg);
    dmd.selectFont(angka_2);
    dmd.drawString(8, 0, sjam, pjpg, 0);

```

```

dmd.selectFont(SystemFont5x7);
dmd.drawString(17, 9, (weekDay[now.dayOfWeek()]), 7, 0);

if (digitalRead(tombol_bOK) == LOW) {
    MenuSetting();}

get_float_time_parts(times[6], hours, minutes);
if ((now.hour() == hours && now.minute() == minutes - 5) || (now.hour() ==
hours && now.minute() == minutes - 4)
|| (now.hour() == hours && now.minute() == minutes - 3)) {

    dmd.clearScreen( true );
    digitalWrite(3, LOW);//alarm sholat
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(5, 0, "MENJELANG", 15, 0); //koordinat tampilan
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 9, "ADZAN", 9, 0); //koordinat tampilan
    delay(300000);
    digitalWrite(3, HIGH);

    digitalWrite(2, HIGH);//alarm sholat
    delay(1000);
    digitalWrite(2, LOW);//alarm sholat
    delay(1000);
    digitalWrite(2, HIGH);//alarm sholat
    delay(1000);
    digitalWrite(2, LOW);//alarm sholat
    delay(1000);

    dmd.clearScreen( true );
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 0, "Adzan ", 5, 0); //koordinat tampilan
    dmd.selectFont(SystemFont5x7);
    dmd.drawString(17, 9, "Isya", 4, 0); //koordinat tampilan
    delay(150000);

    int langkah;
    int waktu_iqomah;
    int panjang_iqomah;
    int iqomah;
    dmd.clearScreen( true );
    dmd.selectFont(SystemFont5x7);
    dmd.clearScreen( true );
    dmd.drawString(15, 0, "IQOMAH", 6, 0); //koordinat tampilan
    int tampil;
    int detik = 60, menit = 6;
    for (detik = 60; detik >= 0; detik--) {
        delay(1000);

```

```

String iqomah = Konversi(menit) + ":" + Konversi(detik);
int panjang_iqomah = iqomah.length() + 1;
char waktu_iqomah[panjang_iqomah];
iqomah.toCharArray(waktu_iqomah, panjang_iqomah);
dmd.drawString(18, 9, waktu_iqomah, panjang_iqomah, 0);
if (detik <= 0) {
    detik = 60;
    menit = menit - 1;}
if (menit <= 0 && detik <= 1) {
    for (tampil = 0; tampil < 300 ; tampil++) {
        menit = 0;
        detik = 0;
        dmd.clearScreen( true );
        dmd.drawString(15, 0, "SHOLAT", 6, 0);
        now = rtc.now();
        String xjam = Konversi(now.hour()) + ":" + Konversi(now.minute()) + ":" +
Konversi(now.second()); //tampilan jam
        int pjg = xjam.length() + 1;
        char sjam[pjg];
        xjam.toCharArray(sjam, pjg);
        dmd.drawString(7, 9, sjam, pjg, 0);
        delay (1000);}}}}}}

String Konversi(int sInput) {
    if (sInput < 10){
        return"0" + String(sInput);}else{
        return String(sInput);} }

```