**Codecook.gsm :**

#include<LiquidCrystal.h>

LiquidCrystal lcd(12,11,2,3,4,5);

String buffer;

String numstring="";

String tstring="";

int temp=0;

int i=0,k=0;

int ct;

const int s1=A0;

const int s2=A1;

const int s3=A2;

const int buz=13;

const int dev1=6;

const int dev2=9;

const int dev3=10;

int s1p;

int s2p;

int s3p;

void setup()

{ pinMode(buz,OUTPUT);

pinMode(dev1,OUTPUT);

pinMode(dev2,OUTPUT);

pinMode(dev3,OUTPUT);

digitalWrite(dev1,0);

digitalWrite(dev2,0);

digitalWrite(dev3,0);

lcd.begin(16,2);

Serial.begin(9600);

lcd.print("SMART COOKER ");

lcd.setCursor(0,1);

lcd.print("CONTROL SYSTEM ");

delay(3000);

gsm\_init();

delay(2000);

Serial.println("AT"); //checking

delay(1000);

Serial.println("AT+CMGF=1"); //Set to Text mode

delay(1000);

Serial.println("AT+CMGD=1"); //Set to Text mode

delay(1000);

Serial.println("AT+CNMI=1, 2, 0, 0, 0");

delay(100);

lcd.clear();

lcd.print("System Ready");

temp=0;

}

void loop()

{

serialEvent();

if(temp==1)

{

statusr();

}

if(temp==2)

{

digitalWrite(dev1,0);

}

if(temp==3)

{

digitalWrite(dev1,0);

}

if(temp==4)

{

digitalWrite(dev1,1);

}

if(temp==5)

{

digitalWrite(dev1,0);

}

if(temp==6)

{

statusrp();

//digitalWrite(dev3,1);

}

if(temp==7)

{

digitalWrite(dev3,0);

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void serialEvent()

{

while(Serial.available())

{ buffer = readSIM900A();

if (buffer.startsWith("\r\n+CMT: "))

{

numstring="";

for(k=9;k<=21;k++)

{

numstring+=buffer[k];

}

// tstring="";

// for(k=56;k<=57;k++)

// {

// tstring+=buffer[k];

// }

buffer.remove(0, 51);

int len = buffer.length();

buffer.remove(len - 2, 2);

//Serial.println(buffer);

lcd.clear();

lcd.setCursor(0,0);

lcd.print("P: ");

lcd.setCursor(3,0);

lcd.print(numstring);

lcd.setCursor(0,1);

lcd.print(buffer);

delay(3000);

tstring="";

for(k=4;k<=5;k++)

{

tstring+=buffer[k];

}

len = buffer.length();

buffer.remove(4,len - 4);

//Serial.println(buffer);

}

if(buffer=="GETS")

{

temp=1;

break;

}

if(buffer=="MON$")

{

temp=2;

digitalWrite(dev1,1);

ct = tstring.toInt();

ct=ct\*60;

lcd.setCursor(0,0);

lcd.print("TIME LEFT: ");

lcd.setCursor(10,0);

lcd.print(ct);

for(i=ct;i>=0;i--)

{

lcd.setCursor(10,0);

lcd.print(" ");

lcd.setCursor(10,0);

lcd.print(i);

delay(1000);

}

digitalWrite(dev1,0);

lcd.clear();

lcd.setCursor(0,0);

lcd.print(" COOKER IS OFF ");

delay(3000);

lcd.clear();

lcd.setCursor(0,0);

lcd.print("system is ready");

break;

}

if(buffer=="PST$")

{

temp=6;

break;

}

if(buffer=="FON$")

{

temp=4;

break;

}

if(buffer=="FOF$")

{

temp=5;

break;

}

if(buffer=="D3ON")

{

temp=6;

break;

}

if(buffer=="D3OFF")

{

temp=7;

break;

}

else

temp=0;

}

}

String readSIM900A()

{

String buffer;

while (Serial.available())

{

char c = Serial.read();

buffer.concat(c);

delay(10);

}

return buffer;

}

void gsm\_init()

{

lcd.clear();

lcd.print("Finding Module..");

boolean at\_flag=1;

while(at\_flag)

{

Serial.println("AT");

while(Serial.available()>0)

{

if(Serial.find("OK"))

at\_flag=0;

}

delay(1000);

}

lcd.clear();

lcd.print("Module Connected..");

delay(1000);

lcd.clear();

lcd.print("Disabling ECHO");

boolean echo\_flag=1;

while(echo\_flag)

{

Serial.println("ATE0");

while(Serial.available()>0)

{

if(Serial.find("OK"))

echo\_flag=0;

}

delay(2000);

}

lcd.clear();

lcd.print("Echo OFF");

delay(1000);

lcd.clear();

lcd.print("Finding Network..");

boolean net\_flag=1;

while(net\_flag)

{

Serial.println("AT+CPIN?");

while(Serial.available()>0)

{

if(Serial.find("+CPIN: READY"))

net\_flag=0;

}

delay(2000);

}

lcd.clear();

lcd.print("Network Found..");

delay(1000);

lcd.clear();

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void init\_sms()

{

Serial.println("AT+CMGF=1");

delay(1000);

//Serial.println("AT+CMGS=\"+919246400662\""); // use 10 digit cell no. here

Serial.print("AT+CMGS=\"");

Serial.print(numstring);

Serial.println("\"");

delay(1000);

}

void send\_data(String message)

{

Serial.println(message);

//delay(500);

}

void send\_sms()

{

Serial.write(26);

}

void lcd\_status()

{

lcd.clear();

lcd.print("Message Sending.");

delay(2000);

lcd.clear();

lcd.print("Message Sent");

delay(2000);

lcd.clear();

lcd.print("System Ready");

return;

}

void statusr()

{

digitalWrite(buz,HIGH);

lcd.clear();

lcd.print("STATUS READING..");

delay(2000);

s1p=digitalRead(s1);

s2p=digitalRead(s2);

s3p=digitalRead(s3);

init\_sms();

delay(1000);

send\_data("STATUS: ");

if (s1p==0)

{

send\_data("D1 OFF ");

}

if (s1p==1)

{

send\_data("D1 ON ");

}

if (s2p==0)

{

send\_data("D2 OFF ");

}

if (s2p==1)

{

send\_data("D2 ON ");

}

if (s3p==0)

{

send\_data("D3 OFF ");

}

if (s3p==1)

{

send\_data("D3 ON ");

}

delay(500);

send\_sms();

delay(1000);

digitalWrite(buz,LOW);

lcd.clear();

lcd.print(" System Ready ");

return;

}

void statusrp()

{

digitalWrite(buz,HIGH);

lcd.clear();

lcd.print("STATUS READING..");

delay(2000);

s1p=digitalRead(s1);

s2p=digitalRead(s2);

s3p=digitalRead(s3);

init\_sms();

delay(1000);

send\_data("POWER STATUS: ");

if (s3p==0)

{

send\_data(" FAIL");

}

if (s3p==1)

{

send\_data(" OK ");

}

delay(500);

send\_sms();

delay(1000);

digitalWrite(buz,LOW);

lcd.clear();

lcd.print(" System Ready ");

return;

}

**MainActivity.java :**

package com.example.mini;

import androidx.appcompat.app.AppCompatActivity;

import androidx.cardview.widget.CardView;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

public class MainActivity extends AppCompatActivity {

CardView rice;

CardView Sambar;

CardView tomatorice;

CardView soup;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

rice = findViewById(R.id.cardrice);

Sambar = findViewById(R.id.Sambarcard);

tomatorice = findViewById(R.id.tomatoricecard);

soup=findViewById(R.id.soupcard);

rice.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

startActivity(new Intent(MainActivity.this, Rice.class));

}

});

Sambar.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

startActivity(new Intent(MainActivity.this, Sambar.class));

}

});

tomatorice.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

startActivity(new Intent(MainActivity.this, tomatorice.class));

}

});

soup.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

startActivity(new Intent(MainActivity.this, soup.class));

}

});

}

}

**Rice.java :**

package com.example.mini;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.app.ActivityCompat;

import android.Manifest;

import android.content.pm.PackageManager;

import android.os.Bundle;

import android.telephony.SmsManager;

import android.text.TextUtils;

import android.view.View;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Spinner;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Arrays;

import java.util.List;

public class Rice extends AppCompatActivity {

private String message;

private String phonenumber="7842673485";

TextView tduration;

private int t;

private int dur;

private int dura;

private String durations;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_rice);

List<String> duration= Arrays.asList("0.5","1","1.5","2");

ActivityCompat.requestPermissions(Rice.this,new String[]{Manifest.permission.SEND\_SMS,

Manifest.permission.READ\_SMS}, PackageManager.PERMISSION\_GRANTED);

tduration=findViewById(R.id.duration);

final Spinner spin=(Spinner)findViewById(R.id.quantity);

ArrayAdapter adapter=new ArrayAdapter(getApplicationContext(),android.R.layout.simple\_spinner\_item,duration);

adapter.setDropDownViewResource(android.R.layout.simple\_spinner\_dropdown\_item);

spin.setAdapter(adapter);

Button on=findViewById(R.id.ON);

Button mof=findViewById(R.id.OFF);

Button warm=findViewById(R.id.warm);

on.setOnClickListener(new View.OnClickListener(){

public void onClick(View view){

String text=spin.getSelectedItem().toString();

EditText editText=findViewById(R.id.enteredvalue);

if (TextUtils. isEmpty(editText. getText(). toString())) {

if (text == "0.5")

t = 1;

else if (text == "1")

t = 2;

else if (text == "1.5")

t = 3;

else if (text == "2")

t = 4;

dur = 20 \* t;

durations = String.valueOf(dur);

}

else{

durations=editText.getText().toString();

}

message="MON$"+ durations+"-rice $";

SmsManager mySmsManager=SmsManager.getDefault();

mySmsManager.sendTextMessage(phonenumber,null,message,null,null);

tduration.setText(durations);

Toast.makeText(getApplicationContext(),durations,Toast.LENGTH\_SHORT);

}

});

warm.setOnClickListener(new View.OnClickListener(){

public void onClick(View view){

String text=spin.getSelectedItem().toString();

EditText editText=findViewById(R.id.enteredvalue);

if (TextUtils. isEmpty(editText. getText(). toString())) {

if (text == "0.5")

t = 1;

else if (text == "1")

t = 2;

else if (text == "1.5")

t = 3;

else if (text == "2")

t = 4;

dur = 20 \* t;

durations = String.valueOf(dur);

}

else{

durations=editText.getText().toString();

}

message="MON$"+ durations+"-rice $";

SmsManager mySmsManager=SmsManager.getDefault();

mySmsManager.sendTextMessage(phonenumber,null,message,null,null);

tduration.setText(durations);

Toast.makeText(getApplicationContext(),durations,Toast.LENGTH\_SHORT);

}

});

}

**Sambar.java :**

package com.example.mini;

import androidx.appcompat.app.AppCompatActivity;

import androidx. core.app. ActivityCompat;

import android.Manifest;

import android.content.pm.PackageManager;

import android.os.Bundle;

import android.telephony. SmsManager;

import android.view.View;

import android.widget. AdapterView;

import android.widget.ArrayAdapter;

import android.widgetButton;

import android.widget.Spinner;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Arrays;

import java.util.List;

public class Sambar extends AppCompatActivity

{

private String message3;

private String phonenumber3="9246400966";

TextView tduration3;

private int t3;

}

});

}

private int dur3;

private String durations3;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super. onCreate(savedlnstance State);

setContentView(R.layout.act/v/(y\_samWJ;

List<String> duration= Arrays.asL/st("0.5","1","1.5","2");

ActivityCompat.reqMestPermissions(Sambar.this,new String[]

{Manifest.permission. SEND\_SMS,

Manifest.permission.R/i'ADS'AMS}, PackageManager.PERMISSION GRANTED);

tduration3=findViewById(R. id.dMration3);

final Spinner spin=(Spinner)findViewById(R.id.qMant/ty3);

ArrayAdapter adapter3=new

ArrayAdapter(getApplicationContext(),android.R.layout. simple spinner item,duration);

adapter3.setDropDownViewResource(android.R.layout.s/mj>/e spinner dropdown item);

spin. setAdapter(adapter3);

Button on3=findViewById(R.id.ON3);

Button mof3=findViewById(R.id. OFF3);

Button warm3=findViewById(R.id. warm3);

on3 .setOnClickListener(new View.OnClickListener(){

public void onClick(View view){

String text3=spin. getSelectedItem().to String();

if(text3=="0.5")

t3=1;

else if(text3=="1")

t3=2;

else if(text3=="1.5")

t3=3;

else if(text3=="2")

t3=4;

dur3=18\*t3;

durations3=String. vo/ueO/(dur.3);

message3="2$MONNNNNNNN$"+ durations3;

SmsManager my SmsManager=SmsManager.ge/De/ou//();

mySmsManager.sendTextMessage(phonenumber3,null,message3,null,null);

tduration3 .setText(durations3);

Toast. moke7ex/(getApplicationContext(),durations3,Toast. LENGTHSHORT);

public void sendSMSOFF3(View view )

{

durations3="0";

message3="2$MOFFFFFFFF$00";

SmsManager mySmsManager=SmsManager.ge/De/ou//();

mySmsManager.sendTextMessage(phonenumber3,null,message3,null,null);

tduration3 .setText(durations3);

}

public void keepwarm3(View view )

{

durations3="5";

message3="5$keepwarmmm$05";

SmsManager mySmsManager=SmsManager.ge/De/ou//();

mySmsManager.sendTextMessage(phonenumber3,null,message3,null,null);

tduration3 .setText(durations3);

Toast.makeText(getApplicationContext(),durations3,Toast.LENGTH\_SHORT);

}

}

**upma.java :**

package com.example.mini;

import androidx.appcompat.app.AppCompatActivity;

import androidx. core.app. ActivityCompat;

import android.Manifest;

import android.content.pm.PackageManager;

import android.os.Bundle;

import android.telephony. SmsManager;

import android.view.View;

import android.widget. AdapterView;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.Spinner;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Arrays;

import java.util.List;

public class upma extends AppCompatActivity

{

private String message4;

private String phonenumber4="9246400966";

TextView tduration4;

private int t4;

private int dur4;

private String durations4;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super. onCreate(savedInstance State);

setContentView(R.layout.activity\_Mpmo);

List<String> duration= Anays.asList("0.5","1","1.5","2");

ActivityCompat.requestPermissions(soup.this,new String[]

{Manifest.permission.SEND\_.SMMS,

Manifest.permission.READ.S'A/S'/, PackageManager.PERMISSION GRANTED);

tduration4=findViewById(R.id.duration4);

final Spinner spin=(Spinner)findViewById(R.id.quantity4);

ArrayAdapter adapter4=new

ArrayAdapter(getApplicationContext(),android.R.layout.simp/e\_5p/nner \_//em.duration);

adapter4.setDropDownViewResource(android.R.layout.simj>/e\_5p/nner dropdown item);

spin.setAdapter(adapter4);

Button on4=findViewById(R. id. ON4);

Button mof4=findViewById(R.id. OFF4);

Button warm4=findViewById(R. id.warm4);

on4. setOnClickListener(new View. OnClickListener()

{

public void onClick(View view)

{

String text4=spin. getSelectedItem().to String();

if(text4=="0.5")

t4=1;

else if(text4=="1")

t4=2;

else if(text4=="1.5")

t4=3;

else if(text4=="2")

t4=4;

dur4=15\*t4;

durations4=String.va/ueO/(dur4);

message4="4$MONNNNNNNN$"+ durations4;

SmsManager mySmsManager=SmsManager.getDe/au/t();

mySmsManager.sendTextMessage(phonenumber4,null,message4,null,null);

tduration4 .setT ext(durations4);

Toast.makeText(getApplicationContext(),durations4,Toast.LENGTH\_SHORT);

}

});

}

public void sendSMSOFF4(View view )

{

durations4="0";

message4="4$MOFFFFFFFF$00";

SmsManager mySmsManager=SmsManager.getDe/aM/t();

mySmsManager.sendTextMessage(phonenumber4,null,message4,null,null);

tduration4 .setT ext(durations4);

}

public void keepwarm4(View view )

{

durations4="5";

message4="5$keepwarmmm$05";

SmsManager mySmsManager=SmsManager.getDe/aM/t();

mySmsManager.sendTextMessage(phonenumber4,null,message4,null,null);

tduration4 .setT ext(durations4);

Toast. makeText(getApplicationContextO.durations4.Toast.LENGTH\_S7/ORT);

}

}

**tomatorice.java :**

package com.example.mini;

import androidx.appcompat.app.AppCompatActivity;

import androidx. core.app. ActivityCompat;

import android.Manifest;

import android.content.pm.PackageManager;

import android.os.Bundle;

import android.telephony. SmsManager;

import android.view.View;

import android.widget. AdapterView;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.Spinner;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Arrays;

import java.util.List;

public class tomatorice extends AppCompatActivity

{

private String message2;

private String phonenumber2="9246400966";

TextView tduration2;

private int t2;

private int dur2;

private String durations2;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super. onCreate(savedlnstance State);

setContentView(R.layout.actlvl(y\_tomatorice);

List<String> duration= Arrays.asList("0.5","1","1.5","2");

ActivityCompat.reque.stPermissions(tomatorice.this.new String[]

{

Manifest.permission.SEND\_SMMS,

Manifest.permission.RE4D\_ SMS}, PackageManager.PERMISSION GRANTED);

tduration2=findViewById(R. id.dMration2);

final Spinner spin=(Spinner)findViewById(R.id.qMantlty2);

ArrayAdapter adapter2=new

ArrayAdapter(getApplicationContext(),android.R.layout.simple spinner

item,duration);

adapter2.setDropDownViewResource(android.R.layout.simj>le, spinner

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dropdownitem);

spin. setAdapter(adapter2);

Button on2=findViewById(R.id.ON2);

Button mof2=findViewById(R.id. OFF2);

Button warm2=findViewById(R.id. warm2);

on2. setOnClickListener(new View. OnClickListener()

{

public void onClick(View view)

{

String text2=spin. getSelectedItem().to String();

if(text2=="0.5")

t2=1;

else if(text2=="1")

t2=2;

else if(text2=="1.5")

t2=3;

else if(text2=="2")

t2=4;

dur2=21\*t2;

durations2= String.va/ueO/(dur2);

message2=" 3 $MONNNNNNNN$" + durations2;

SmsManager mySmsManager=SmsManager.getDe/aM/t();

mySmsManager.sendTextMessage(phonenumber2,null,message2,null,null);

tduration2 .setT ext(durations2);

Toast,.makeText(getApplicationContext(),duration£,2,Toast.LENGTH\_SHORT);

}

});

}

public void sendSMSOFF2(View view )

{

durations2="00";

message2=" 3 $MOFFFFFFFF$ "+durations2;

SmsManager mySmsManager=SmsManager.getDe/aM/t();

mySmsManager.sendTextMessage(phonenumber2,null,message2,null,null);

tduration2 .setT ext(durations2);

}

public void keepwarm2(View view )

{

durations2="5";

message2="5$keepwarmmm$05";

SmsManager mySmsManager=SmsManager.getDe/aM/t();

mySmsManager.sendTextMessage(phonenumber2,null,message2,null,null);

tduration2 .setT ext(durations2);

Toast.makeText(getApplicationContext(),durations2,Toast.LENGTH\_SHORT);

}

}