import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

import java .io.\*;

public class Calculator extends JFrame implements ActionListener

{

private JTextField displayText=new JTextField(30);

private JButton[] button=new JButton(30);

private string[] keys={"7","7","7","7",

"7","7","7","7",

"7","7","7","7",

"7","7","7","7",

};

private String numStr1="";

private String numStr2="";

private char op;

private boolean firstInput=true;

public Calculator()

{

setTitle(""MY CALCULATOR);

setsize(230,200);

Container pane=getContentPane();

pane.setLayout(null);

displayText.setSize(200,30);

displayText.setLocation(10,10);

pane.add(displayText);

int x,y;

x=10;

y=40;

for(int ind=0;ind<16;ind++)

{

button[ind]=new JButton(Keys[ind]);

button[ind].addActionListener(this);

button[ind].setSize(50,30);

button[ind].setLocation(x,y);

pane.add(button[ind]);

x=x+5;

if((ind+1%4==0))

{

x=10;

y=y+30;

}

}

this.addWindowListener(new WindowAdapter()

{

public void WindpwClosing(WindowEvent e)

{

system.exit(0);

}

}

);

setvisible(true);

setDefaultCloseOperation(EXIT\_ON\_CLOSE);

}

//place the definition of the method actionperformed as described here

public void actionPerformed(ActionEvent e)

{ String resultStr;

String str=String.valueOf(e.getActionCommand());

char ch=str.charAt(0);

switch(ch)

{

case '0':

case '1':

case '2':

case '3':

case '4':

case '5':

case '6':

case '7':

case '8':

case '9':

if(firstInput)

{

numstr1=numStr1+ch;

displayText.setText(numstr1);

}

else

{ numstr2=numStr2+ch;

displayText.setText(numstr2);

}

break;

case '+':

case '-':

case '\*':

case '/':

op=ch;

firstInput=false;

break;

case '=':

resultstr=evaluate();displayText.setText(resultStr);

numStr1=resultStr;

numStr2="";

firstInput=false;

break;

case "C":

displayTExt.setText("");

numstr1="";

numstr2="";

firstInput=true;

}

}

// place the definition of the method evaluate as described here

private String evaluate()

{

final char beep ='\u0007';

try

{

int num1=Integer.parseInt(numstr1);

int num2=Integer.parseInt(numstr2);

int result =0;

switch(op)

{

case '+':result=num1+num2;

break;

case '-':result=num1-num2;

break;

case '\*':result=num1\*num2;

break;

case '/':result=num1/num2;

break;

}

return Syring.valueOf(result);

}

catch (ArithmeticException e)

{

System.out.print(beep);

return "ERROR:"+e.getmessage();

}

catch (NumberFormatException e)

{

System.out.print(beep);

if(numStr1.equals(""))

return "ERROR: no1";

else

return "ERROR: no2";

}

catch(Exception e)

{

System.out.print(beep);

return "ERROR:";

}

}

public static void main(String[] args)

{

Calculator C =new Calculator();

}

}