//11.1

//Write a java program to generate a simple calculator using AWT components

import java.awt.\*;

import java.awt.event.\*;

import java.applet.\*;

import javax.swing.\*;

/\* <applet code="Cal" width=300 height=300>

</applet>\*/

public class Cal extends Applet

implements ActionListener{

String msg=" ";

int v1,v2,result;

TextField t1;

Button b[]=new Button[10];

Button add,sub,mul,div,clear,mod,EQ;

char OP;

public void init()

{

Panel p1=new Panel();

t1=new TextField(30);

Panel p2=new Panel();

p2.setLayout(new GridLayout(4,4));

for(int i=0;i<10;i++)

{

b[i]=new Button(""+i);

}

add=new Button("+");

sub=new Button("-");

mul=new Button("\*");

div=new Button("/");

clear=new Button("clear");

EQ=new Button("=");

t1.addActionListener(this);

p1.add(t1);

for(int i=0;i<10;i++)

{

p2.add(b[i]);

}

p2.add(add);

p2.add(sub);

p2.add(mul);

p2.add(div);

p2.add(clear);

p2.add(EQ);

add(p1); add(p2);

for(int i=0;i<10;i++)

{

b[i].addActionListener(this);

}

add.addActionListener(this);

sub.addActionListener(this);

mul.addActionListener(this);

div.addActionListener(this);

clear.addActionListener(this);

EQ.addActionListener(this);

}

public void actionPerformed(ActionEvent ae) {

String str=ae.getActionCommand();

char ch=str.charAt(0);

if ( Character.isDigit(ch))

t1.setText(t1.getText()+str);

else

if(str.equals("+")) {

v1=Integer.parseInt(t1.getText());

OP='+';

t1.setText(""); }

else if(str.equals("-")) {

v1=Integer.parseInt(t1.getText());

OP='-';

t1.setText("");

}

else if(str.equals("\*")) {

v1=Integer.parseInt(t1.getText());

OP='\*';

t1.setText("");

}

else if(str.equals("/")) {

v1=Integer.parseInt(t1.getText());

OP='/';

t1.setText("");

}

if(str.equals("=")){

v2=Integer.parseInt(t1.getText());

if(OP=='+')

result=v1+v2;

else if(OP=='-')

result=v1-v2;

else if(OP=='\*')

result=v1\*v2;

else if(OP=='/')

result=v1/v2;

t1.setText(""+result);

}

if(str.equals("clear")){

t1.setText("");

}

}

}

OUTPUT:





