import java.awt.\*;

import java.awt.event.\*;

class MyCalc extends WindowAdapter implements ActionListener{

Frame f;

Label l1;

Button b1,b2,b3,b4,b5,b6,b7,b8,b9,b0;

Button badd,bsub,bmult,bdiv,bmod,bcalc,bclr,bpts,bneg,bback;

double xd;

double num1,num2,check;

MyCalc(){

f= new Frame("MY CALCULATOR");

l1=new Label();

l1.setBackground(Color.LIGHT\_GRAY);

l1.setBounds(50,50,260,60);

b1=new Button("1");

b1.setBounds(50,340,50,50);

b2=new Button("2");

b2.setBounds(120,340,50,50);

b3=new Button("3");

b3.setBounds(190,340,50,50);

b4=new Button("4");

b4.setBounds(50,270,50,50);

b5=new Button("5");

b5.setBounds(120,270,50,50);

b6=new Button("6");

b6.setBounds(190,270,50,50);

b7=new Button("7");

b7.setBounds(50,200,50,50);

b8=new Button("8");

b8.setBounds(120,200,50,50);

b9=new Button("9");

b9.setBounds(190,200,50,50);

b0=new Button("0");

b0.setBounds(120,410,50,50);

bneg=new Button("+/-");

bneg.setBounds(50,410,50,50);

bpts=new Button(".");

bpts.setBounds(190,410,50,50);

bback=new Button("back");

bback.setBounds(120,130,50,50);

badd=new Button("+");

badd.setBounds(260,340,50,50);

bsub=new Button("-");

bsub.setBounds(260,270,50,50);

bmult=new Button("\*");

bmult.setBounds(260,200,50,50);

bdiv=new Button("/");

bdiv.setBounds(260,130,50,50);

bmod=new Button("%");

bmod.setBounds(190,130,50,50);

bcalc=new Button("=");

bcalc.setBounds(245,410,65,50);

bclr=new Button("CE");

bclr.setBounds(50,130,65,50);

b1.addActionListener(this);

b2.addActionListener(this);

b3.addActionListener(this);

b4.addActionListener(this);

b5.addActionListener(this);

b6.addActionListener(this);

b7.addActionListener(this);

b8.addActionListener(this);

b9.addActionListener(this);

b0.addActionListener(this);

bpts.addActionListener(this);

bneg.addActionListener(this);

bback.addActionListener(this);

badd.addActionListener(this);

bsub.addActionListener(this);

bmult.addActionListener(this);

bdiv.addActionListener(this);

bmod.addActionListener(this);

bcalc.addActionListener(this);

bclr.addActionListener(this);

f.addWindowListener(this);

//ADDING TO FRAME

f.add(l1);

f.add(b1); f.add(b2); f.add(b3); f.add(b4); f.add(b5);f.add(b6); f.add(b7); f.add(b8);f.add(b9);f.add(b0);

f.add(badd); f.add(bsub); f.add(bmod); f.add(bmult); f.add(bdiv); f.add(bmod);f.add(bcalc);

f.add(bclr); f.add(bpts);f.add(bneg); f.add(bback);

f.setSize(360,500);

f.setLayout(null);

f.setVisible(true);

}

public void windowClosing(WindowEvent e) {

f.dispose();

}

public void actionPerformed(ActionEvent e){

String z,zt;

if(e.getSource()==b1){

zt=l1.getText();

z=zt+"1";

l1.setText(z);

}

if(e.getSource()==b2){

zt=l1.getText();

z=zt+"2";

l1.setText(z);

}

if(e.getSource()==b3){

zt=l1.getText();

z=zt+"3";

l1.setText(z);

}

if(e.getSource()==b4){

zt=l1.getText();

z=zt+"4";

l1.setText(z);

}

if(e.getSource()==b5){

zt=l1.getText();

z=zt+"5";

l1.setText(z);

}

if(e.getSource()==b6){

zt=l1.getText();

z=zt+"6";

l1.setText(z);

}

if(e.getSource()==b7){

zt=l1.getText();

z=zt+"7";

l1.setText(z);

}

if(e.getSource()==b8){

zt=l1.getText();

z=zt+"8";

l1.setText(z);

}

if(e.getSource()==b9){

zt=l1.getText();

z=zt+"9";

l1.setText(z);

}

if(e.getSource()==b0){

zt=l1.getText();

z=zt+"0";

l1.setText(z);

}

if(e.getSource()==bpts){

zt=l1.getText();

z=zt+".";

l1.setText(z);

}

if(e.getSource()==bneg){

zt=l1.getText();

z="-"+zt;

l1.setText(z);

}

if(e.getSource()==bback){

zt=l1.getText();

try{

z=zt.substring(0, zt.length()-1);

}catch(StringIndexOutOfBoundsException f){return;}

l1.setText(z);

}

if(e.getSource()==badd){

try{

num1=Double.parseDouble(l1.getText());

}catch(NumberFormatException f){

l1.setText("Invalid Format");

return;

}

z="";

l1.setText(z);

check=1;

}

if(e.getSource()==bsub){

try{

num1=Double.parseDouble(l1.getText());

}catch(NumberFormatException f){

l1.setText("Invalid Format");

return;

}

z="";

l1.setText(z);

check=2;

}

if(e.getSource()==bmult){

try{

num1=Double.parseDouble(l1.getText());

}catch(NumberFormatException f){

l1.setText("Invalid Format");

return;

}

z="";

l1.setText(z);

check=3;

}

if(e.getSource()==bdiv){

try{

num1=Double.parseDouble(l1.getText());

}catch(NumberFormatException f){

l1.setText("Invalid Format");

return;

}

z="";

l1.setText(z);

check=4;

}

if(e.getSource()==bmod){

try{

num1=Double.parseDouble(l1.getText());

}catch(NumberFormatException f){

l1.setText("Invalid Format");

return;

}

z="";

l1.setText(z);

check=5;

}

if(e.getSource()==bcalc){

try{

num2=Double.parseDouble(l1.getText());

}catch(Exception f){

l1.setText("ENTER NUMBER FIRST ");

return;

}

if(check==1)

xd =num1+num2;

if(check==2)

xd =num1-num2;

if(check==3)

xd =num1\*num2;

if(check==4)

xd =num1/num2;

if(check==5)

xd =num1%num2;

l1.setText(String.valueOf(xd));

}

if(e.getSource()==bclr){

num1=0;

num2=0;

check=0;

xd=0;

z="";

l1.setText(z);

}

}

public static void main(String args[]){

new MyCalc();

}

}