import java.util.\*;

/\*java template is different from c++ template.It needs abstract class and

\* one final method.In this method template methods are declared.The class which is

\* extending abstract class should define every template function.

\* In java template method can have different signatures in different classes.

\*/

abstract class TempDemo{

public final void TDemo(){

accept();

display();

perform();

}

protected abstract void accept(); //template method

protected abstract void display();

protected abstract void perform();

}

class TempOmpl extends TempDemo{

int a,b,c,d;

Scanner sc = new Scanner(System.in);

protected void accept(){

System.out.println("Enter first number");

a=sc.nextInt();

System.out.println("Enter second number");

b=sc.nextInt();

}

protected void display(){

System.out.println("first number is"+a);

System.out.println("second number is"+b);

}

protected void perform(){

do{

System.out.println("Enter choice\n1.Multiply\n2.Divide\n3.Exit");

d=sc.nextInt();

if(d==1){

d=a\*b;

System.out.println("Multiplication of two numbers is"+d);

}

else if(d==2){

try{

d=a/b;

System.out.println("Division of two numbers is"+d);

}

catch(ArithmeticException e){

System.out.println(":Warning divide by zero error");

}

catch(Exception e1){

System.out.println("Any exception");

}

finally{

System.out.println("Executed any way");

}

System.out.println("Out of try catch");

}

}while(d!=3);

}

}

public class TempExp{

public static void main( String[] args){

TempDemo Td=new TempOmpl(); //upcasting

Td.accept();

Td.display();

Td.perform();

}

}