物件導向程式設計 第六次小考

Object-Oriented Programming Quiz 6

1.

請修改下列程式碼讓程式執行成功。在此有兩個檔案,分別是 package p1 和 package p2。你必須將 package p2 的 class class 2 用在 class 1 中。

Your program needs to be written based on the following framework so that it can be executed successfully. There are **two files** which are package p1 and package p2, respectively. You need to use package p2's class class2 in class1.

```
package p1;
 // To Do; import package p2 的 class2
 public class class1 {
     public static void main(String args[])
         String str, ans1;
         int num;
         num = Integer.parseInt("123"); // 為何不用先建立Integer物件
         System.out.println(num);
         ans1="把答案打在這 Typing your answere here";
         System.out.println(ans1);
         StringBuffer str1 = new StringBuffer("rainy & sunny");
         System.out.println(str1);
         // To Do 1 line; 修改str1成 windy & sunny
                           Modifying str1 to "windy & sunny"
         class2 cc = new class2();
         cc.show();
      }
 }
package p2;
public class class2 {
    void show() {
                      //修改這行讓show()可以被其他package存取; show() can be accessed from different packages
                                                            by modifying this line.
       System.out.println("using show()");
}
```

請修改下列程式碼並在 Main 使用泛型類別 class *CMember* 的函數 *show()* 輸出 *s、s1* 變數中的內容。並使用泛型類別 class *CMember* 的函數 *set()* 設定 class *CMember* 內區域變數的值。

Please revise the code and use the function *show()* of the generic class *CMember* to output the contents of the *s* and *s1* variables. Use the function *set()* of the generic class *CMember* to set the value of the local variable in the class *CMember*. Your program needs to be completed based on the following framework.

```
public class main1 {
    public static void main(String[] args) {
        CMember<String,Integer> a = new CMember<String,Integer>();
       CMember<Integer,String> a1 = new CMember<Integer,String>();
String[] s = {"four","five","three","one","two"};
        Integer[] s1 = {4,5,3,1,2};
        a.set(s,s1);
        a1.set(s1,s);
        a.show();
        System.out.println("\n");
        al.show();
class CMember<> // To Do 只能增加一行 (You can just add one line here.)
    // To Do 增加數行。只能宣告變數,不能增加其他函數
    // (You can just add several lines and only declare variables. Can't declare other functions)
    public void set() // To Do 只能增加一行 (You can just add one line here.)
        // To Do 可以新增數行程式碼 (You can add several lines here.)
    public void show()
        // To Do 可以新增數行程式碼 (You can add several lines here.)
}
Output
4 : four
5 : five
3 : three
1 : one
2 : two
four: 4
five : 5
three: 3
one: 1
two: 2
```

3.

根據下圖程式,請寫出一個程式讓使用者可以輸入兩個數字 $N \cdot M$,並且輸出 N 除以 M 的結果。

● 限制 1:<u>不可</u>刪減現有的程式碼。

Consider the code below. Your program is required to take as input two numbers N and M, and outputs N divided by M.

• Limit 1: You are **NOT** allowed to delete the code given in this quiz.

```
package test06;
    import java.util.Scanner;
   □public class test06{
       public static void main(String arg[]) {
5
6
 7
            Scanner scn1 = new Scanner(System.in);
8
            System.out.println("Input two numbers");
9
            int N = scn1.nextInt();
            int M = scn1.nextInt();
10
11
            Func func1 = new Func();
            // To Do 只能新增一行(You can just add one line here.)
12
13
            // 不可以使用if-else或switch. (You are not allowed to use if-else and switch.)
14
15
            func1.div1(N, M);
16
            // To Do 可以新增數行程式碼(You can add several lines here.)
17
            scn1.close();
18
19
   L}
21 ⊟class Func{
22 🖨
        final void div1(int N, int M) {
23
            float result = N/M/0;
24
            System.out.printf("result: %f", result);
25
26
        // To Do 可以新增數行程式碼(You can add several lines here.)
27
28
29
```

Example:

```
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<terminated > test06_result [Java /
Input two numbers
5 3
result: 1.666667
```