

佛光大學九十六學年度碩士班招生考試試題卷

系所別：資訊學所

科目：Java 程式設計

用紙第 1 頁共 2 頁

1. Rewrite the following **for** loop into a **while** loop. (10 points.)

```
for (int i=0; i<1000; i++) {  
    System.out.println(i);  
}
```

2. Assume the class `spring.fields.Straw` has been defined. Write a possible **implementation** for the following interface `HayStack` as specified in the comments. (30 points.)

```
package some.farms.granary;  
  
public interface HayStack {  
    Straw removeStraw(); // remove a straw from the HayStack.  
    void addStraw(Straw); // add a straw into the HayStack.  
    boolean isLastStraw(); // return true, if there is only one straw in the HayStack;  
                           // false, otherwise.  
}
```

3. Rewrite the following **switch** statement into a nested **if-else** statement. (10 points.)

```
switch (num) {  
    case 1:  
    case 3:  
    case 5: System.out.println(num+" is odd."); break;  
    case 2:  
    case 4:  
    case 6: System.out.println( num+" is even."); break;  
    default: System.out.println("Error: out of range.");  
}
```

佛光大學九十六學年度碩士班招生考試試題卷

系所別：資訊學所

科 目：Java 程式設計

用紙第 2 頁共 2 頁

4. Write a Java program: HelloWorld.java which would output message "Hello World!" onto the screen. (10 points.)
5. List at least three differences between an **interface** and an **abstract class** in Java. (30 points.)
(Hint: How are they declared? When and/or where to use them?)
6. What is the output of the following piece of code in Java? (10 points.)

```
int i=1;
for (int i=1; i<10; i++) {
    // do something interesting.
}
```

```
System.out.println( "i = " + i);
```