

# Java 物件導向

Bing & Liam

20170316

# Facebook Group



<https://goo.gl/BXecww>

# Evaluation

- Lab Exercises: 5%
- Assignment: 30%

# Assignment

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使用說明:請以<上傳檔案>的方式繳交作業

章別	作業名稱	題目	繳交期限	配分	評語檔	正確解答	交作業	上傳檔案	觀看繳交作業	觀賞優良作業
0	測試	作業題目	2017-03-10	0%	<a href="#">尚無評語</a>	<a href="#">未公佈</a>	<a href="#">交作業</a>	<a href="#">上傳檔案</a>	<a href="#">觀看已繳交作業</a>	<a href="#">欣賞優良作業</a>

# 注意事項！！！！

1. 程式碼內要含註解, 並且要生成 **Javadoc**
2. class 命名為 IntegerTester
3. 檔案取名 yourStudentID\_1 (e.g. 605530018\_1)
4. 完成 = 輸出+壓縮+上傳
5. 第一次作業期限為 3/23

**Primitive type**

# Code

```
3 public class variable {
4     public static void main(String args[]){
5         // Java 有八種基本型態 (Primitive type)
6         byte var_byte = 127;
7         System.out.println("byte: "+var_byte);
8         short var_short = 32767;
9         System.out.println("short: "+var_short);
10        int var_int = 2147483647;
11        System.out.println("int: "+var_int);
12        long var_long = 9223372036854775807L;
13        System.out.println("long: "+var_long);
14
15        float var_float = 0.5F;
16        System.out.println("float: "+var_float);
17        double var_double = 0.5;
18        System.out.println("double: "+var_double);
19
20        boolean var_boolean = true;
21        System.out.println("boolean: "+var_boolean);
22
23        char var_char = 'A';
24        System.out.println("char: "+var_char);
25        /* 物件型態 (Object type) */
26        String a = "I Love ";
27        //new String Object
28        String b = new String("JAVA !");
29        System.out.println(a+b);
30    }
31 }
```

# Result

```
byte: 127
short: 32767
int: 2147483647
long: 9223372036854775807
float: 0.5
double: 0.5
boolean: true
char: A
I Love JAVA !
```

# Primitive type

型態類型	關鍵字	位元數	範圍
整數	<b>byte</b>	8	-128 ~ 127
整數	<b>short</b>	16	-32768 ~ 32767
整數	<b>int</b>	32	-2147483648 ~ 2147483647
整數	<b>long</b>	64	-9223372036854775808 ~ 9223372036854775807
浮點數	<b>float</b>	32	依據 IEEE 754 標準
浮點數	<b>double</b>	64	依據 IEEE 754 標準
布林值	<b>boolean</b>	1	true, false
字元	<b>char</b>	16	'\u0000' - '\uffff'



# **Main Argument**

# Main Argument

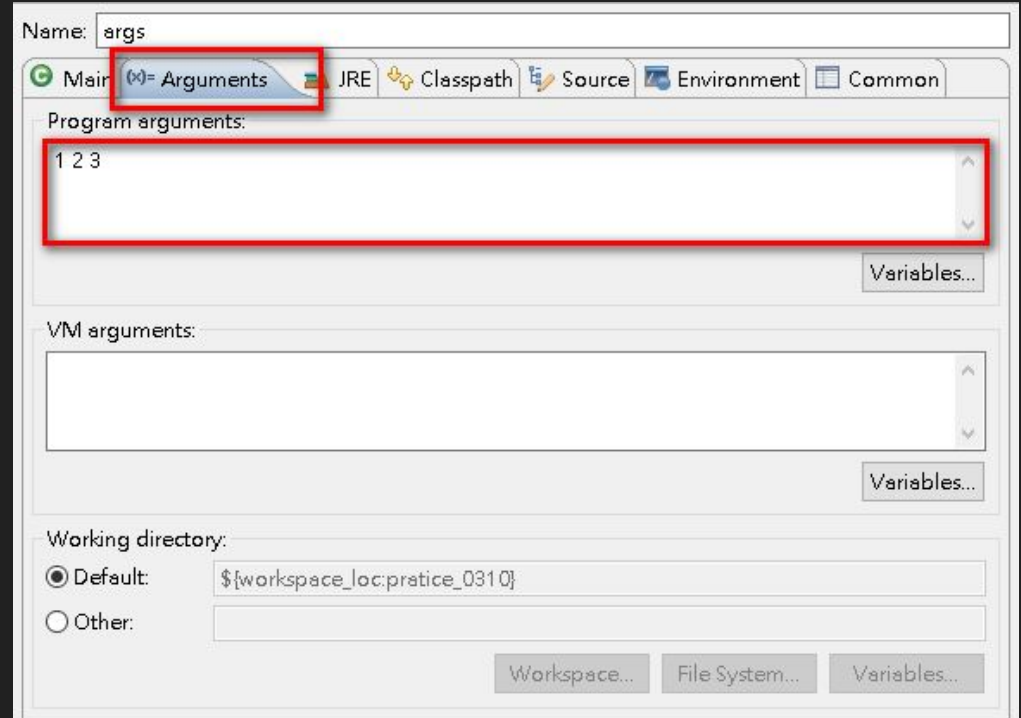
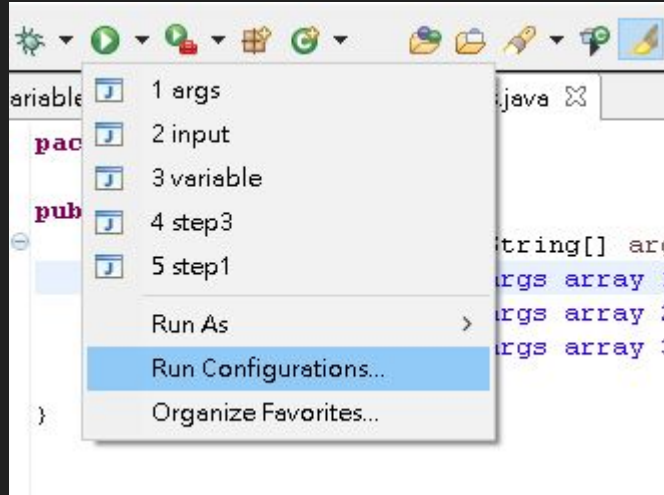
## Code

```
3 public class args {  
4     public static void main(String[] args) {  
5         System.out.println("args array 1:"+args[0]);  
6         System.out.println("args array 2:"+args[1]);  
7         System.out.println("args array 3:"+args[2]);  
8     }  
9 }
```

## Result

```
args array 1:1  
args array 2:2  
args array 3:3
```

# Main Argument(cont.)



Scanner

# Code

```
1 // input.java
2 import java.util.Scanner;
3 import java.lang.Math;
4 /** This is a i/o example program.
5  * @author Bing
6  * @version 1.0
7  */
8 public class input {
9     /** main class
10     *
11     * @param args array of string arguments
12     */
13     public static void main(String args[]){
14         int num1, num2, num3;
15         Scanner scanner = new Scanner(System.in);
16
17         System.out.println("Enter two integers and less than 50: ");
18
19         num1 = scanner.nextInt();
20         while(num1 > 50){
21             System.out.println("not greater than 50");
22             num1 = scanner.nextInt();
23         }
24
25         num2 = scanner.nextInt();
26         while(num2 > 50){
27             System.out.println("not greater than 50");
28             num2 = scanner.nextInt();
29         }
30
31         System.out.println("first number: " + num1 );
32         System.out.println("second number: " + num2 );
33         System.out.println("sum: " + (num1+num2));
34         System.out.println("average: " + (double) (num1+num2)/2);
35         System.out.println("average: " + (num1+num2) / (double) 2);
36         System.out.println("average: " + (num1+num2)/2F);
37         System.out.println("distance: " + Math.abs(num1-num2));
38     }
39 }
```

# Result

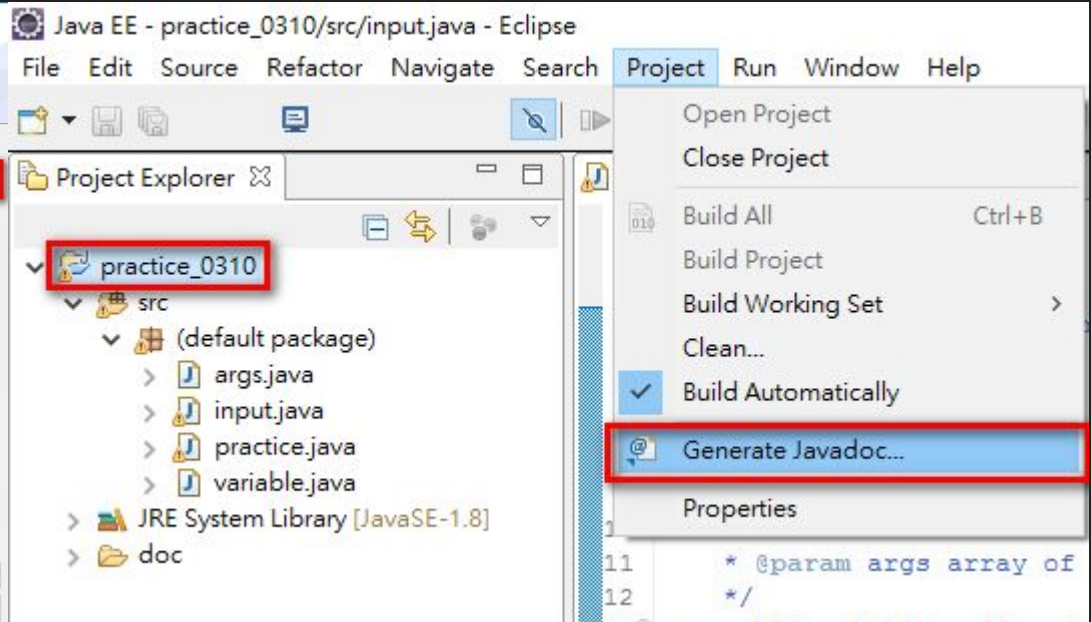
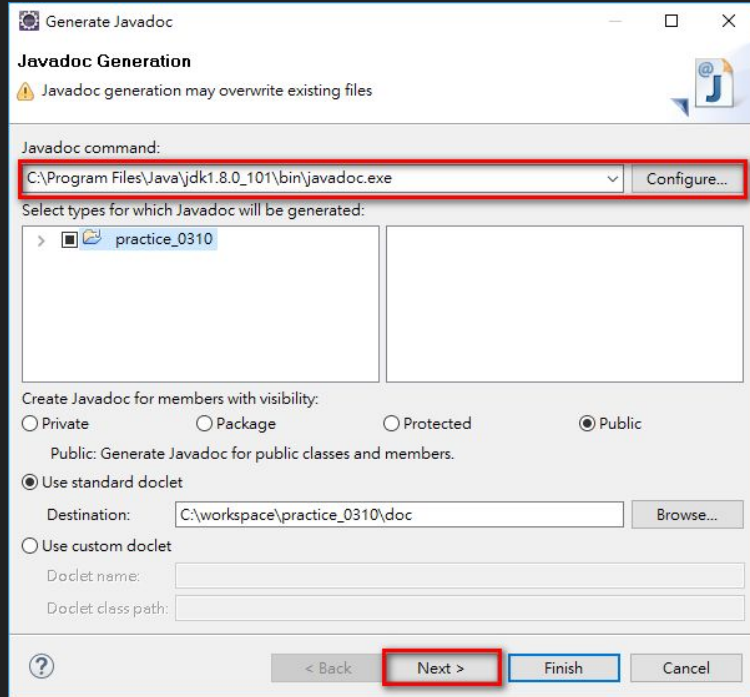
```
Enter two integers and less than 50:
20 25
first number: 20
second number: 25
sum: 45
average: 22.5
average: 22.5
average: 22.5
distance: 5
```



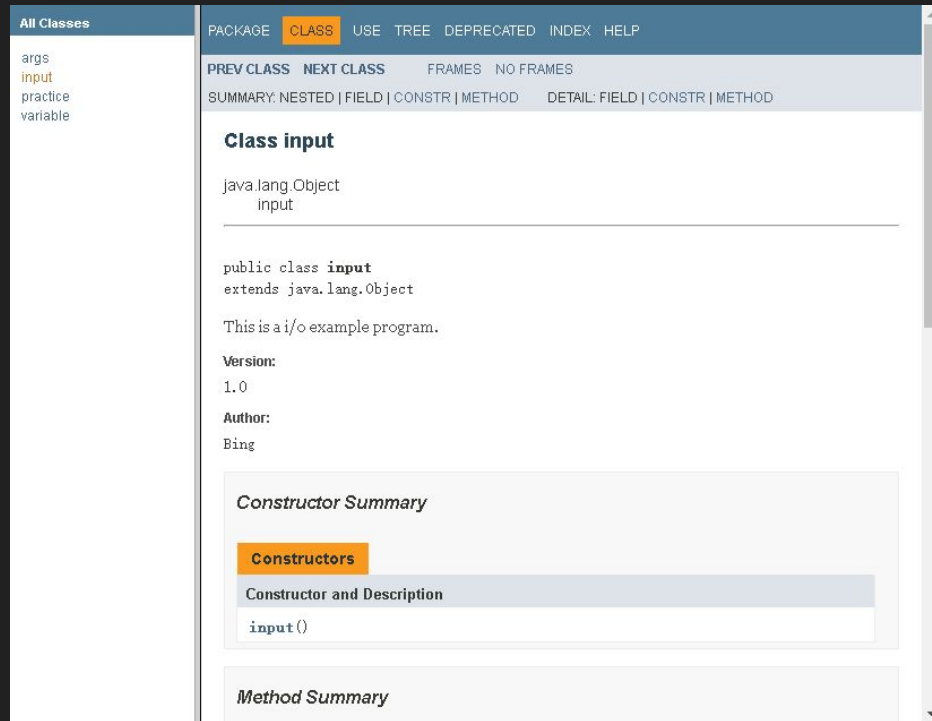
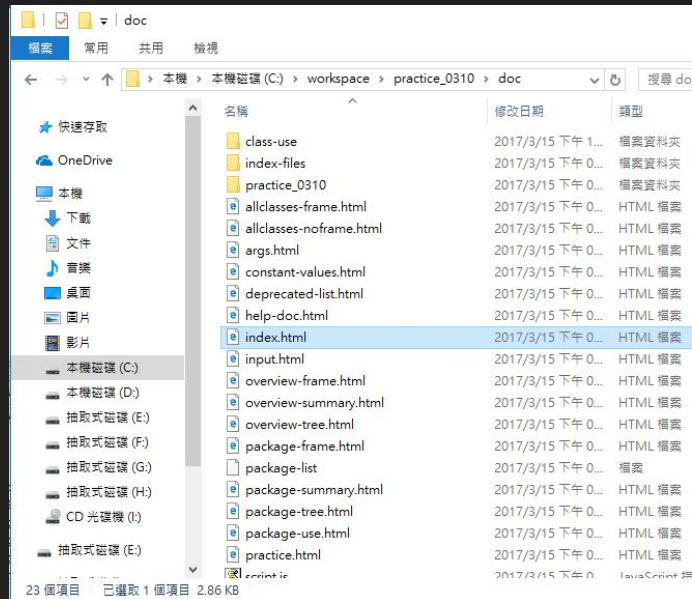
[java.lang.Math](https://docs.oracle.com/javase/8/docs/api/java/lang/Math.html)

注意！！！！

# Javadoc

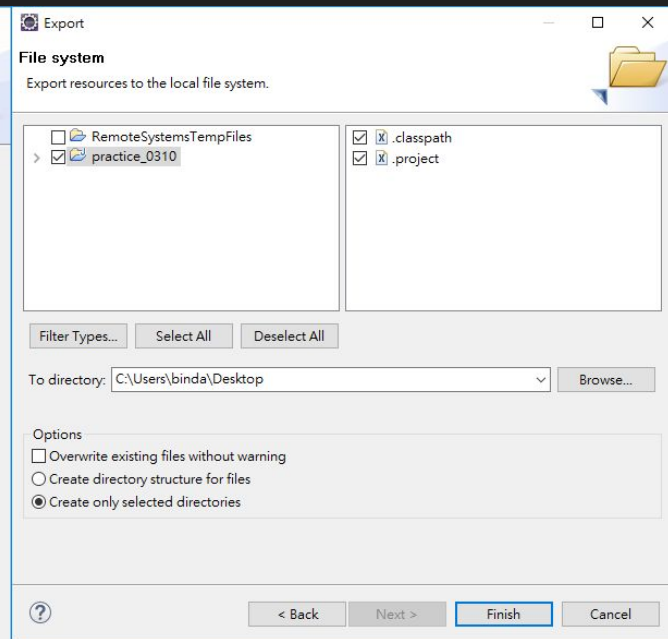
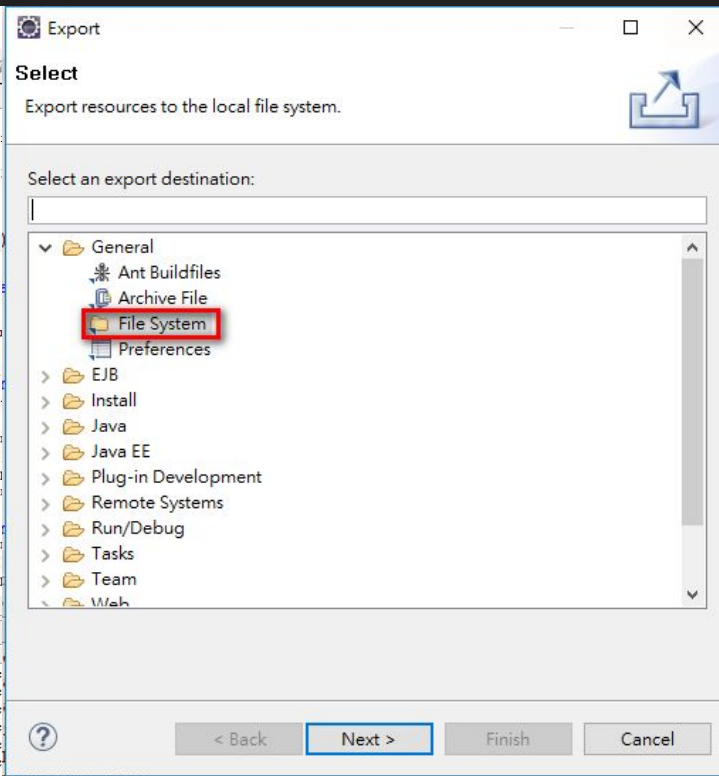
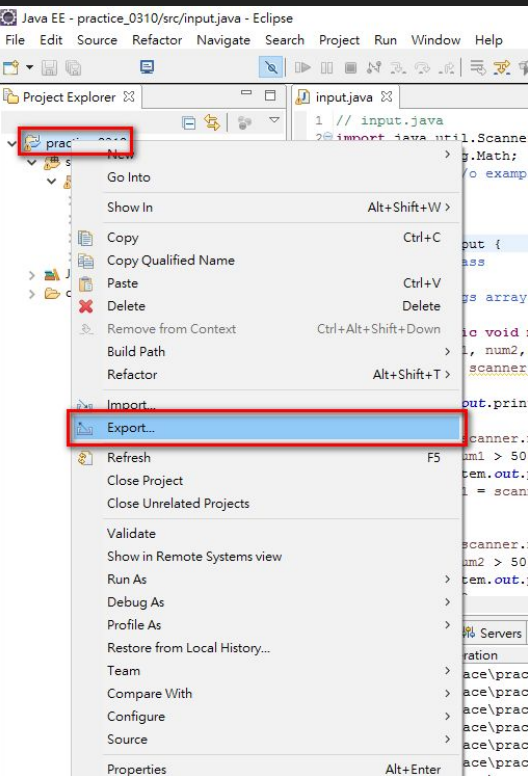


# Javadoc(cont.)





# Export



**END**

下課 = 練習完畢 + 簽名