

# JAVA JDK 安裝和設定步驟

02/Sep/2018

## 1. 下載所須的相關軟體

(例如 在 d 碟建一目錄 d:\downloads，然後將下載的檔案存放於此目錄下)

google “JDK”  
[\(http://www.oracle.com/technetwork/java/javase/downloads/index.html\)](http://www.oracle.com/technetwork/java/javase/downloads/index.html)

The screenshot shows the Oracle Java Downloads page. At the top right, there is a search icon and a star icon. Below the address bar, there is a sidebar with links: Installation Instructions, Release Notes, Oracle JDK License, Java SE Licensing Information User Manual (which includes Third Party Licenses), Certified System Configurations, and Readme. On the right side, there are three main download sections: Oracle JDK (with a blue 'DOWNLOAD' button), Server JRE (with a blue 'DOWNLOAD' button), and JRE (with a blue 'DOWNLOAD' button). A red box and an arrow point to the 'JDK DOWNLOAD' button.

<https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

JDK 8u241 checksum

**Java SE Development Kit 8u241**

You must accept the [Oracle Technology Network License Agreement for Oracle Java SE](#) to download this software.

Accept License Agreement  Decline License Agreement

Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	72.94 MB	<a href="#">jdk-8u241-linux-arm32-vfp-hflt.tar.gz</a>
Linux ARM 64 Hard Float ABI	69.83 MB	<a href="#">jdk-8u241-linux-arm64-vfp-hflt.tar.gz</a>
Linux x86	171.28 MB	<a href="#">jdk-8u241-linux-i586.rpm</a>
Linux x86	186.1 MB	<a href="#">jdk-8u241-linux-i586.tar.gz</a>
Linux x64	170.65 MB	<a href="#">jdk-8u241-linux-x64.rpm</a>
Linux x64	185.53 MB	<a href="#">jdk-8u241-linux-x64.tar.gz</a>
Mac OS X x64	254.06 MB	<a href="#">jdk-8u241-macosx-x64.dmg</a>
Solaris SPARC 64-bit (SVR4 package)	133.01 MB	<a href="#">jdk-8u241-solaris-sparcv9.tar.Z</a>
Solaris SPARC 64-bit	94.24 MB	<a href="#">jdk-8u241-solaris-sparcv9.tar.gz</a>
Solaris x64 (SVR4 package)	133.8 MB	<a href="#">jdk-8u241-solaris-x64.tar.Z</a>
Solaris x64	92.01 MB	<a href="#">jdk-8u241-solaris-x64.tar.gz</a>
Windows x86	200.86 MB	<a href="#">jdk-8u241-windows-i586.exe</a>
Windows x64	210.92 MB	<a href="#">jdk-8u241-windows-x64.exe</a>

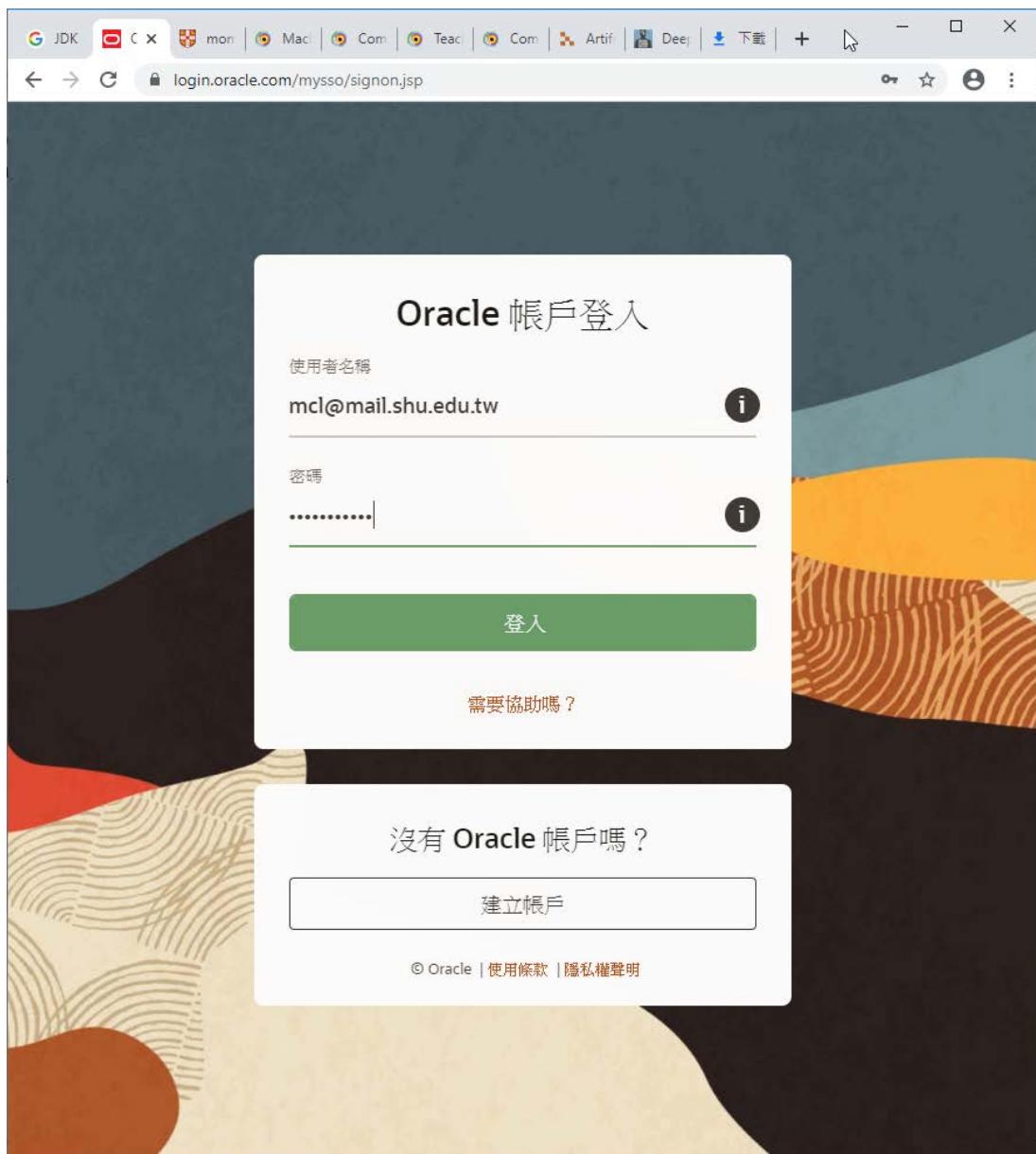
**Java SE Development Kit 8u241 Demos and Samples Downloads**

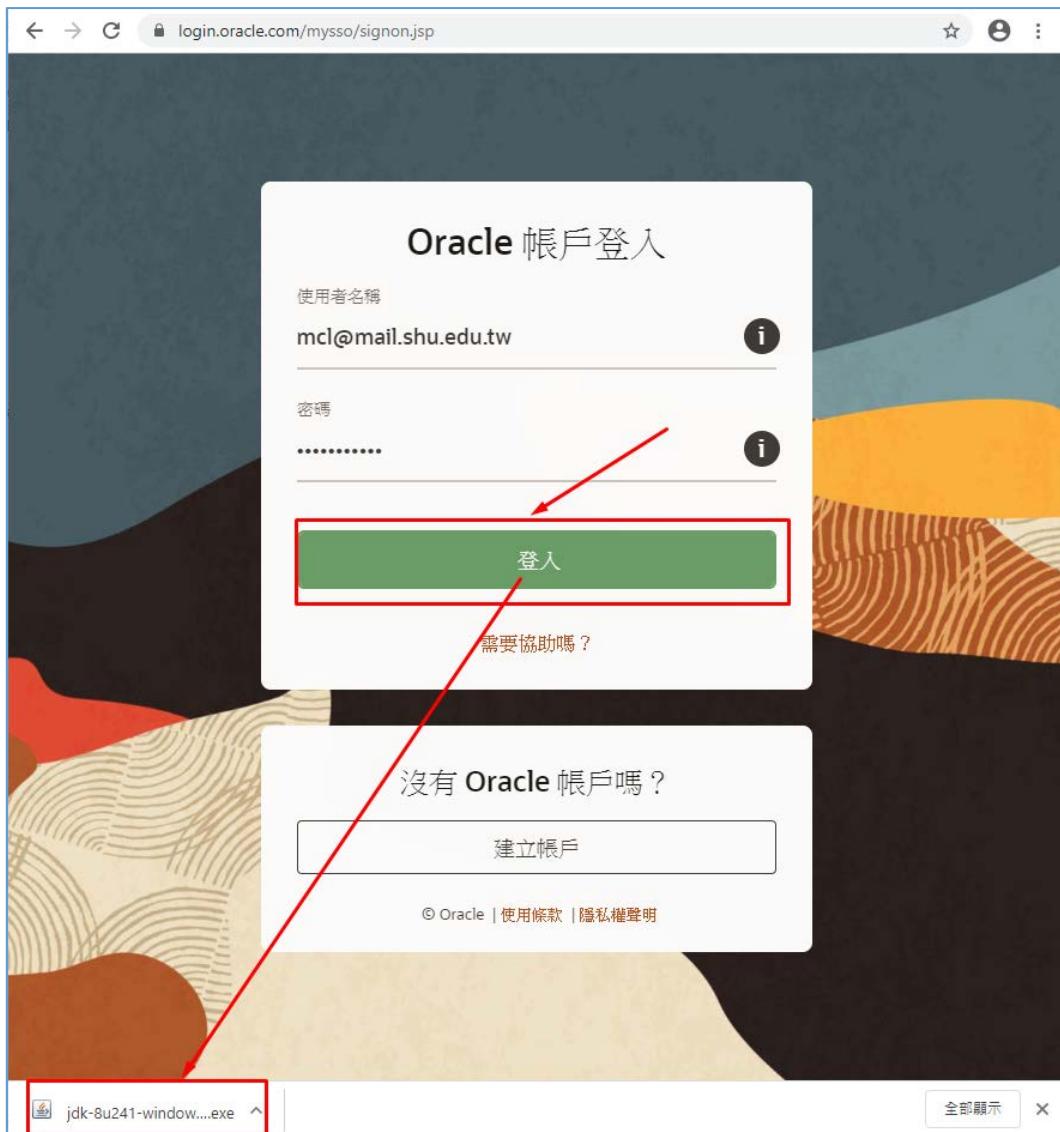
You must accept the [Oracle BSD License](#), to download this software.

Accept License Agreement  Decline License Agreement

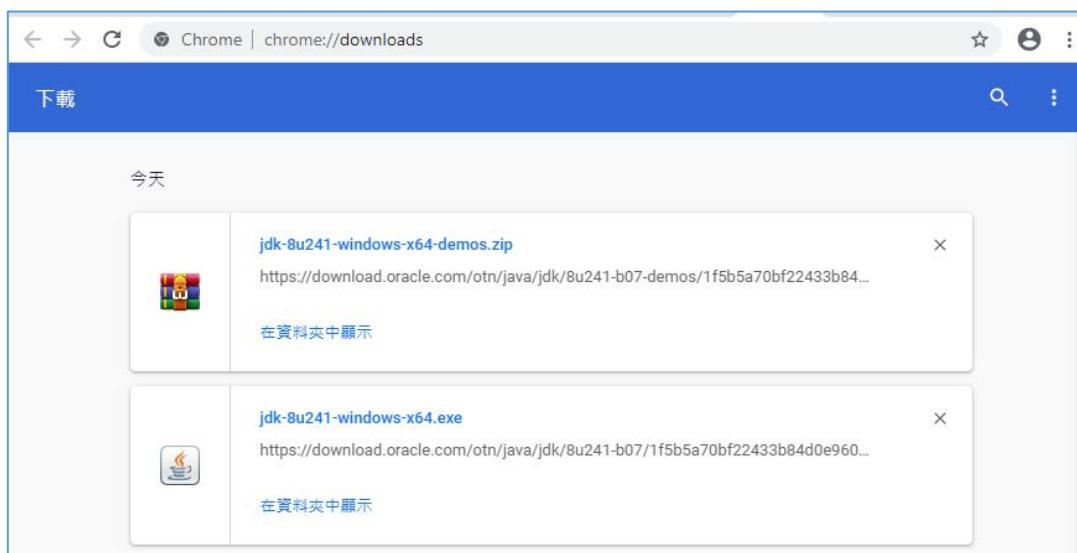
Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	9.08 MB	<a href="#">jdk-8u241-linux-arm32-vfp-hflt-demos.tar.gz</a>
Linux ARM 64 Hard Float ABI	9.07 MB	<a href="#">jdk-8u241-linux-arm64-vfp-hflt-demos.tar.gz</a>
Linux x86	56.42 MB	<a href="#">jdk-8u241-linux-i586-demos.rpm</a>
Linux x86	56.28 MB	<a href="#">jdk-8u241-linux-i586-demos.tar.gz</a>
Linux x64	56.53 MB	<a href="#">jdk-8u241-linux-x64-demos.rpm</a>
Linux x64	56.36 MB	<a href="#">jdk-8u241-linux-x64-demos.tar.gz</a>
Mac OS X	56.55 MB	<a href="#">jdk-8u241-macosx-x86_64-demos.zip</a>
Solaris SPARC 64-bit	12.23 MB	<a href="#">jdk-8u241-solaris-sparcv9-demos.tar.Z</a>
Solaris SPARC 64-bit	8.47 MB	<a href="#">jdk-8u241-solaris-sparcv9-demos.tar.gz</a>
Solaris x64	12.21 MB	<a href="#">jdk-8u241-solaris-x64-demos.tar.Z</a>
Solaris x64	8.44 MB	<a href="#">jdk-8u241-solaris-x64-demos.tar.gz</a>
Windows x86	57.26 MB	<a href="#">jdk-8u241-windows-i586-demos.zip</a>
Windows x64	57.28 MB	<a href="#">jdk-8u241-windows-x64-demos.zip</a>

[Accept License Agreements](#) and Download above 2 files.





After downloaded 2 files:



Name	Date modified	Type	Size
jdk-8u212-windows-x64.exe	6/13/2019 9:08 PM	Application	220,428 KB
jdk-8u212-windows-x64-demos.zip	6/13/2019 9:10 PM	WinRAR ZIP archive	58,404 KB
eclipse-jee-2019-03-R-win32-x86_64.zip	6/13/2019 8:11 PM	WinRAR ZIP archive	348,044 KB

圖 1-1 下載的 JDK 相關檔案。

Here: JDK: jdk-8u212-windows-x64.exe

## 2. 安裝軟體：

請依次序安裝,如果是 Default(默認的)目錄一般就會為:

JDK → C:\Program Files\Java\jdk1.8.0\_212 (also “C:\Program Files\Java\jre1.8.0\_212”也會被安裝)  
Note：假設你要安裝在其它的 Local Disk 下，也可以。

Name	Date modified	Type	Size
jdk1.8.0_202	3/24/2019 10:52 PM	File folder	
jre1.8.0_211	5/6/2019 2:08 AM	File folder	
ReadMe.txt	3/24/2019 10:40 PM	Text Document	1 KB

圖 2-1 JDK 安裝的 Default(默認的)目錄。

### 2.1 安裝 JDK: (C:\Program Files\Java\jdk1.8.0\_212)

- (1) 首先 Google “JDK”→下載 Java Platform (JDK) 8u212 (下載頁面為) :

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

Note:建議也 Download JDK 的 Demos and Samples ( File of Demos and Samples) (在此為 jdk-8u212-windows-x64-demos.zip)。

https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

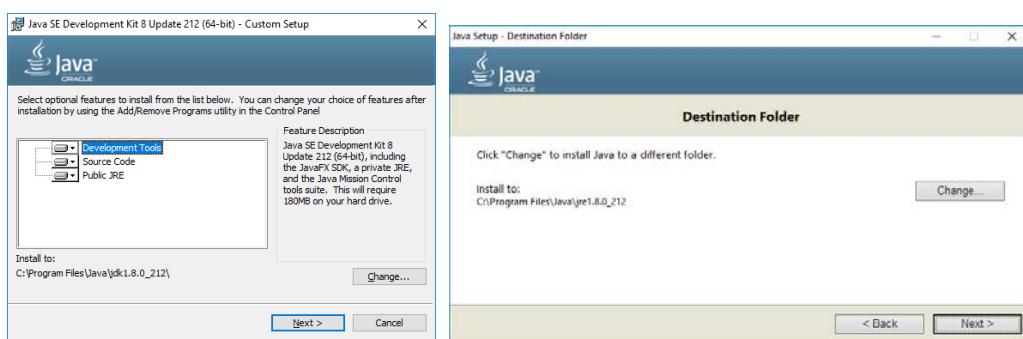
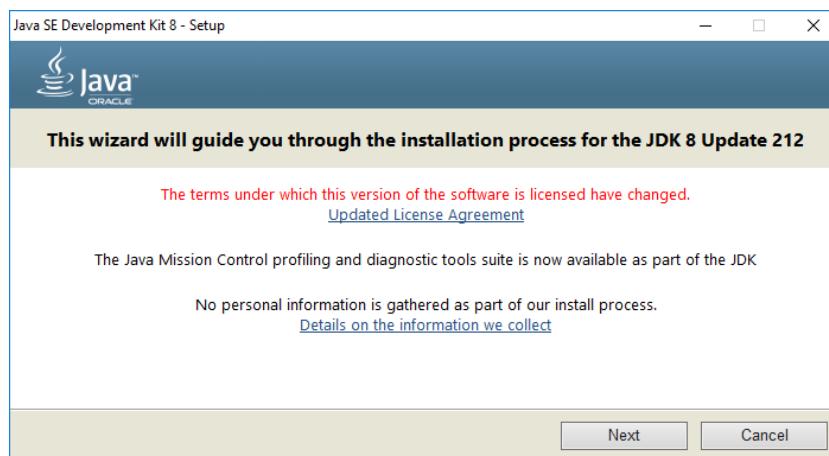
Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	72.86 MB	<a href="#">jdk-8u211-windows-i586-demos.zip</a>
Linux ARM 64 Hard Float ABI	69.77 MB	<a href="#">jdk-8u211-linux-arm64-vfp-hflt.tar.gz</a>
Linux x86	174.11 MB	<a href="#">jdk-8u211-linux-i586.rpm</a>
Linux x86	188.92 MB	<a href="#">jdk-8u211-linux-i586.tar.gz</a>
Linux x64	171.13 MB	<a href="#">jdk-8u211-linux-x64.rpm</a>
Linux x64	185.98 MB	<a href="#">jdk-8u211-linux-x64.tar.gz</a>
Mac OS X x64	252.25 MB	<a href="#">jdk-8u211-macosx-x64.dmg</a>
Solaris SPARC 64-bit (SVR4 package)	125.06 MB	<a href="#">jdk-8u212-solaris-sparcv9.tar.Z</a>
Solaris SPARC 64-bit	88.15 MB	<a href="#">jdk-8u212-solaris-sparcv9.tar.gz</a>
Solaris x64 (SVR4 package)	124.3 MB	<a href="#">jdk-8u212-solaris-x64.tar.Z</a>
Solaris x64	85.41 MB	<a href="#">jdk-8u212-solaris-x64.tar.gz</a>
Windows x86	202.64 MB	<a href="#">jdk-8u212-windows-i586.exe</a>
Windows x64	215.26 MB	<a href="#">jdk-8u212-windows-x64.exe</a>

Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	9.07 MB	<a href="#">jdk-8u212-linux-arm32-vfp-hflt-demos.tar.gz</a>
Linux ARM 64 Hard Float ABI	9.07 MB	<a href="#">jdk-8u212-linux-arm64-vfp-hflt-demos.tar.gz</a>
Linux x86	51.18 MB	<a href="#">jdk-8u212-linux-i586-demos.rpm</a>
Linux x86	56.04 MB	<a href="#">jdk-8u212-linux-i586-demos.tar.gz</a>
Linux x64	56.27 MB	<a href="#">jdk-8u212-linux-x64-demos.rpm</a>
Linux x64	56.12 MB	<a href="#">jdk-8u212-linux-x64-demos.tar.gz</a>
Mac OS X	56.3 MB	<a href="#">jdk-8u212-macosx-x66_64-demos.zip</a>
Solaris SPARC 64-bit	12.24 MB	<a href="#">jdk-8u212-solaris-sparcv9-demos.tar.Z</a>
Solaris SPARC 64-bit	8.44 MB	<a href="#">jdk-8u212-solaris-sparcv9-demos.tar.gz</a>
Solaris x64	12.3 MB	<a href="#">jdk-8u212-solaris-x64-demos.tar.Z</a>
Solaris x64	8.44 MB	<a href="#">jdk-8u212-solaris-x64-demos.tar.gz</a>
Windows x86	57.01 MB	<a href="#">jdk-8u212-windows-i586-demos.zip</a>
Windows x64	57.03 MB	<a href="#">jdk-8u212-windows-x64-demos.zip</a>

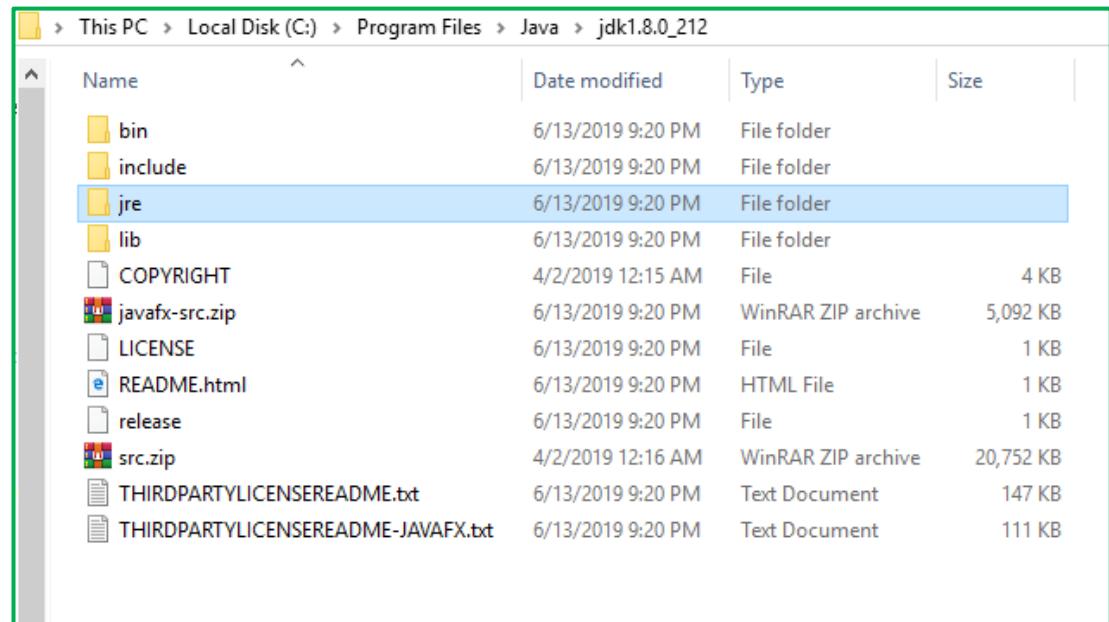
E-mail this page Printer View

圖 2-2 Java Platform (JDK)的下載頁面。





- (2) 然後運行 **jdk1.8.0\_212** 安裝程式 **C:\Program Files\Java\jdk1.8.0\_212**。安裝過程中所有選項保持默認；(<http://docs.oracle.com/javase/8/docs/>)



(3)

將 “**jdk-8u212-windows-x64-demos.zip**”加以解壓縮之後；  
 →將 “**jdk-8u212-windows-x64-demos\jdk1.8.0\_212**” 下的所有檔案 COPY 後；  
 →再 PASTE 到“**C:\Program Files\Java\jdk1.8.0\_212**”下；

如下面所有圖示：

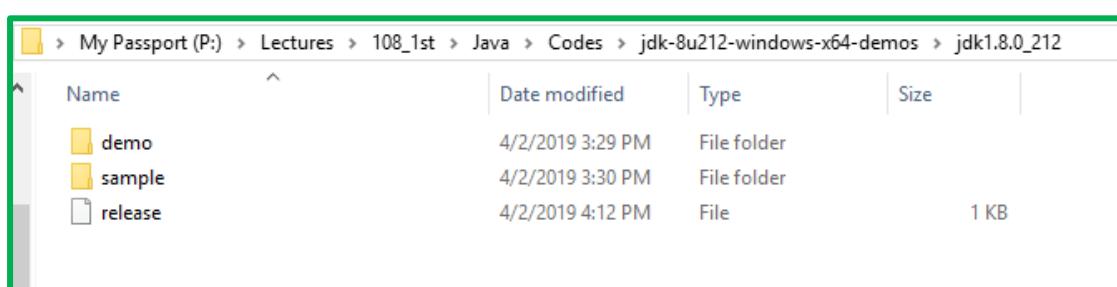


圖 2-3 JDK 的 Demos and Samples 內容。

Name	Date modified	Type	Size
bin	6/13/2019 9:20 PM	File folder	
demo	6/13/2019 9:33 PM	File folder	
include	6/13/2019 9:20 PM	File folder	
jre	6/13/2019 9:20 PM	File folder	
lib	6/13/2019 9:20 PM	File folder	
sample	6/13/2019 9:33 PM	File folder	
COPYRIGHT	4/2/2019 12:15 AM	File	4 KB
javafx-src.zip	6/13/2019 9:20 PM	WinRAR ZIP archive	5,092 KB
LICENSE	6/13/2019 9:20 PM	File	1 KB
README.html	6/13/2019 9:20 PM	HTML File	1 KB
release	4/2/2019 4:12 PM	File	1 KB
src.zip	4/2/2019 12:16 AM	WinRAR ZIP archive	20,752 KB
THIRDPARTYLICENSEREADME.txt	6/13/2019 9:20 PM	Text Document	147 KB
THIRDPARTYLICENSEREADME-JAVAFX.txt	6/13/2019 9:20 PM	Text Document	111 KB

圖 2-4 JDK 安裝之後的內容。

如前所述，請依次序安裝，如果是 Default(默認的)目錄一般就會為：

Name	Date modified	Type	Size
jdk1.8.0_212	6/13/2019 9:33 PM	File folder	
jre1.8.0_212	6/13/2019 9:21 PM	File folder	
ReadMe.txt	3/24/2019 10:40 PM	Text Document	1 KB

圖 2-5 JDK 和 JRE 安裝只後的 Default(默認的)目錄。

JDK → C:\Program Files\Java\jdk1.8.0\_212 (also “C:\Program Files\Java\jre1.8.0\_212”也會被安裝)  
Note：假設你要安裝在其它的 Local Disk 下，也可以。

## 2.2 最後配置 JDK 的環境變數

首先：

- 在“我的電腦”上點 Mouse 右鍵 → “內容” → “進階” → “環境變數(N)”；
- 或者選擇：“開始” → “我的電腦” → “檢視系統資訊” → “進階” → “環境變數(N)”；
- 或者選擇：“開始” → “控制臺” → “系統” “進階” → “環境變數(N)”。

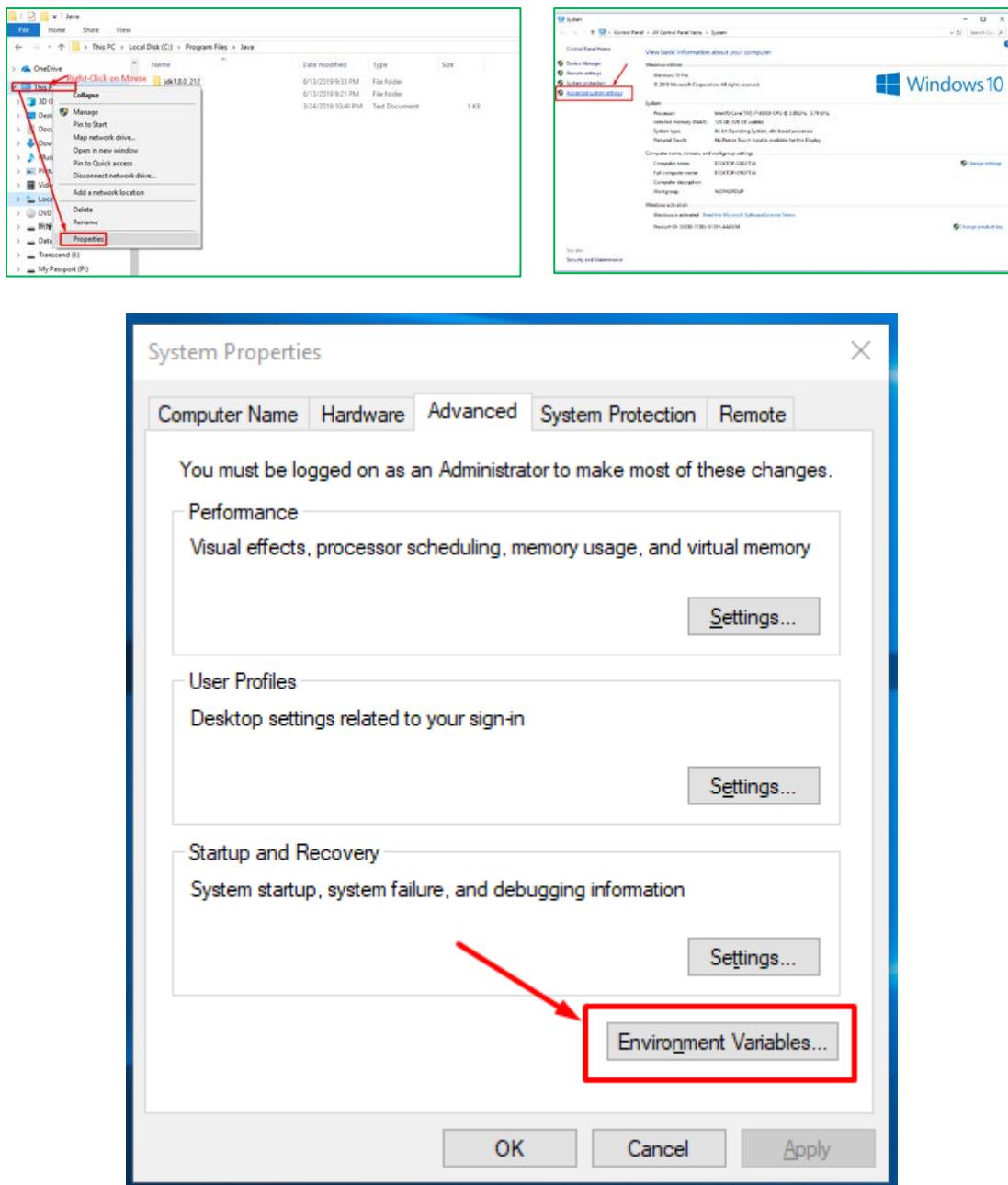
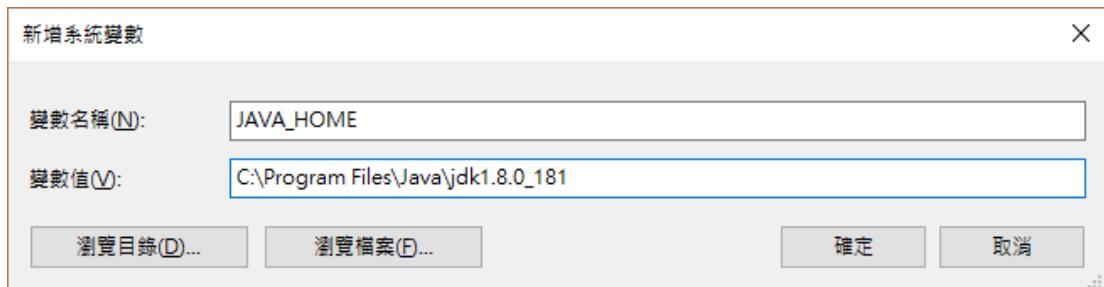


圖 2-6 尋找配置 JDK 的環境變數的路徑流程。

然後：

- (1) 新增或 Edit 一系統變數“JAVA\_HOME”，其值為 “C:\Program Files\Java\jdk1.8.0\_212”  
(不含引號，下同)。 (然後按“確定”)



(above was added before .... Now needed to edit as below:)

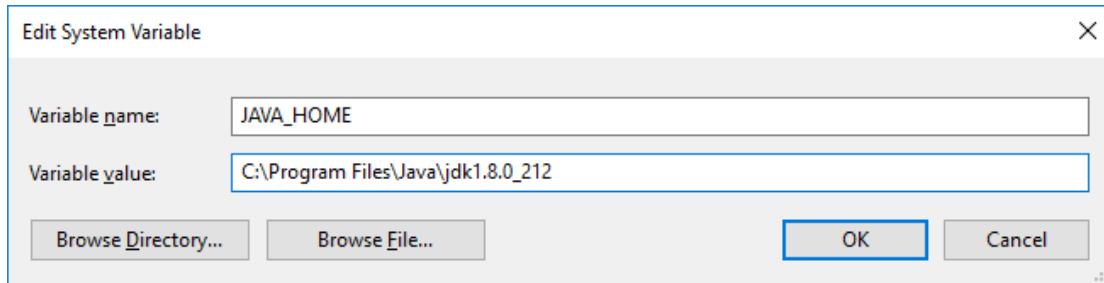


圖 2-7 新增或 Edit 系統變數“JAVA\_HOME”。

(2) 新建系統變數 **CLASSPATH**：“.;%JAVA\_HOME%\lib”；或“.;C:\Program Files\Java\jdk1.8.0\_202\lib；〔注意：點號表示當前目錄，不能省略〕

**Note:** 建議在此的 **CLASSPATH** 採用“.;%JAVA\_HOME%\lib”。如此之下，才可以免掉將來環境系統變數需要做重新編輯和修正時，很多不必要的麻煩。

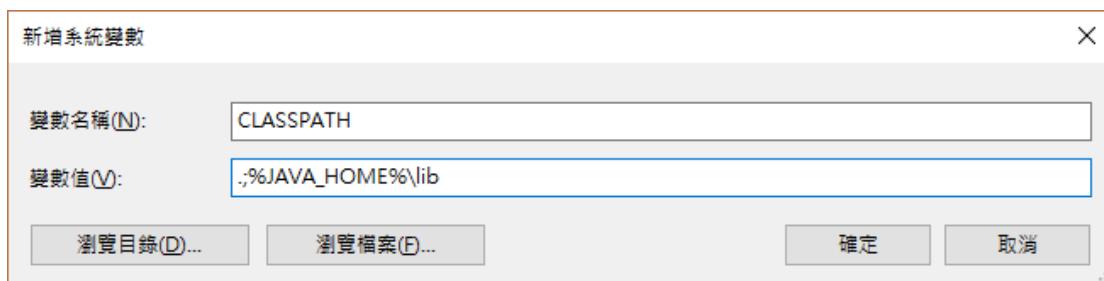
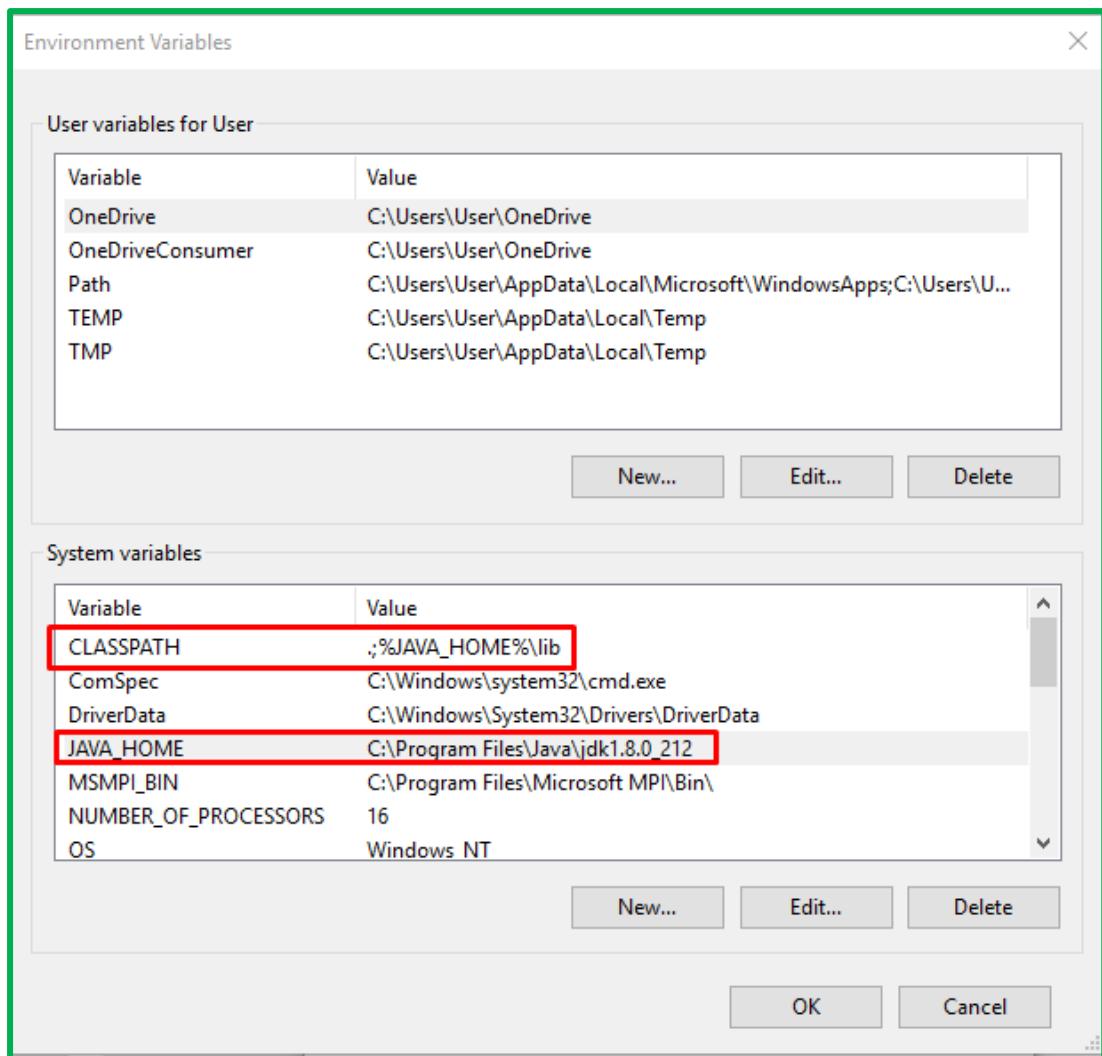


圖 2-8 新建系統變數 CLASSPATH。



(3) 請在系統變數找到 **PATH(或 Path)** 選“**編輯**”，然後在『“其中”或者其“最後面”』加入  
“;”後，再接著加入以下內容：“**%JAVA\_HOME%\bin**”；或**“C:\Program  
Files\Java\jdk1.8.0\_212\bin”**；(注意：這裏的分號不能省略；)

**Note:** 類似於上述有關 **CLASSPATH** 的做法，建議在此的 **PATH** 內容最好採用  
“**%JAVA\_HOME%\bin**”。如此之下，才可以免掉將來環境系統變數需要做重新編  
輯和修正時，很多不必要的麻煩。

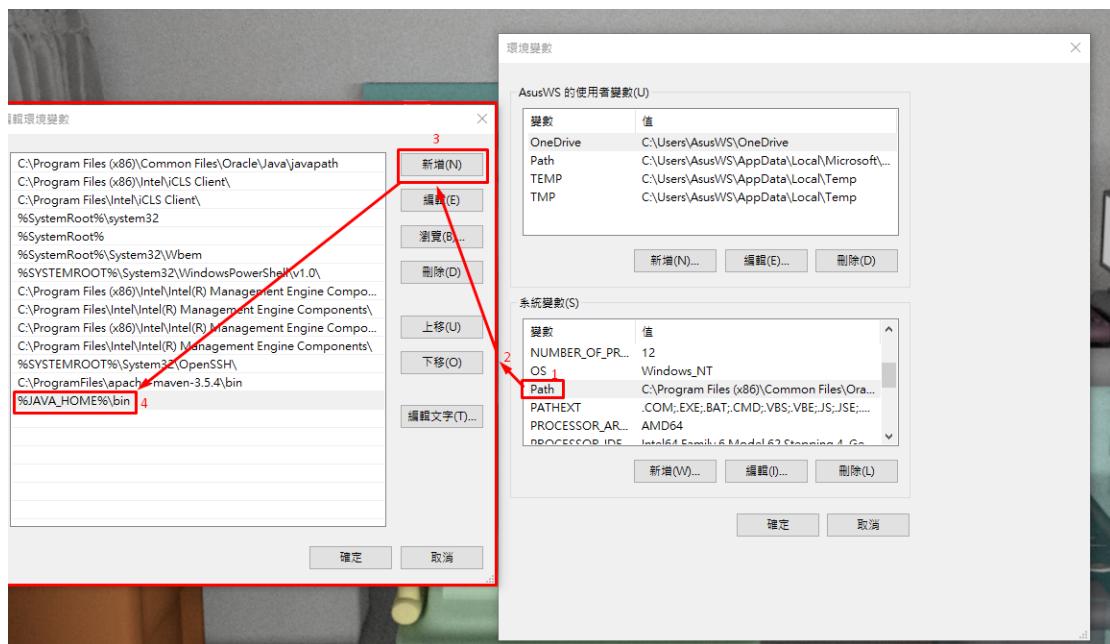
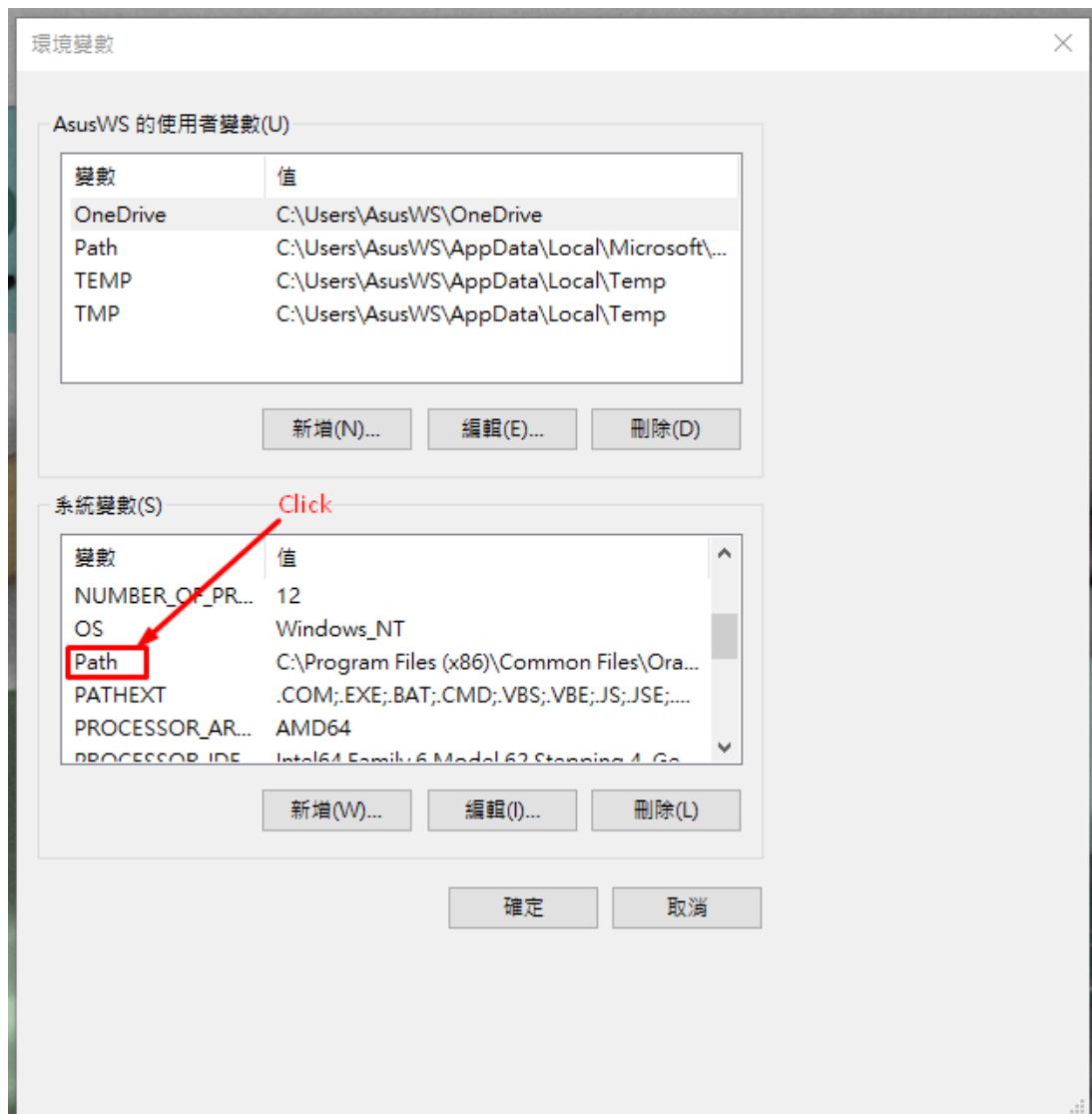


圖 2-9 編輯 PATH(或 Path)系統變數：加入“%JAVA\_HOME%\bin”。

JDK 環境設定完成了。完成安裝後，不同的系統可能會要求重新開機，請重新開機完成設定。為了確保 JDK 可正常運作，請依以下的步驟，檢查相關設定。

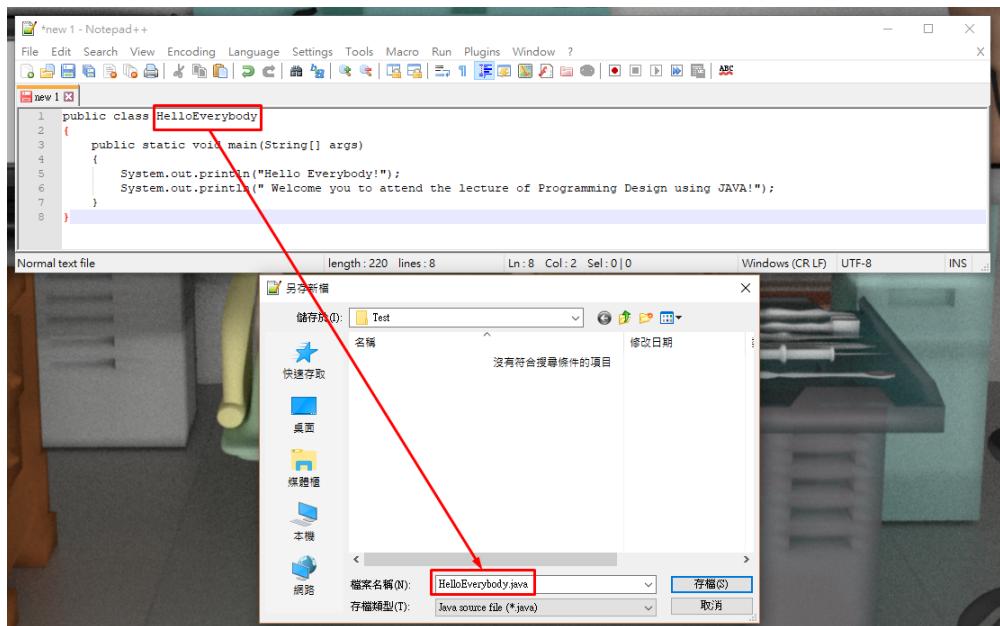
### 3. 測試 JDK 是否安裝成功

下面為了測試一下 JDK 是否安裝成功，將以下內容複製到記事本中：

表 3-1 測試 JDK 是否安裝成功的 Java 測試程式內容。

```
public class HelloEverybody
{
    public static void main(String[] args)
    {
        System.out.println("Hello Everybody!");
        System.out.println(" Welcome you to attend the lecture of Programming Design using JAVA!");
    }
}
```

並將其另存為“HelloEverybody.java”（不含引號，下同）；例如假設將其保存到 G 盤的“P:\Lectures\108\_1st\Java\Test”目錄下；當然也不妨考慮保存到 C 或 E 盤或... (Anyway, it's your choice. You are the boss!)。



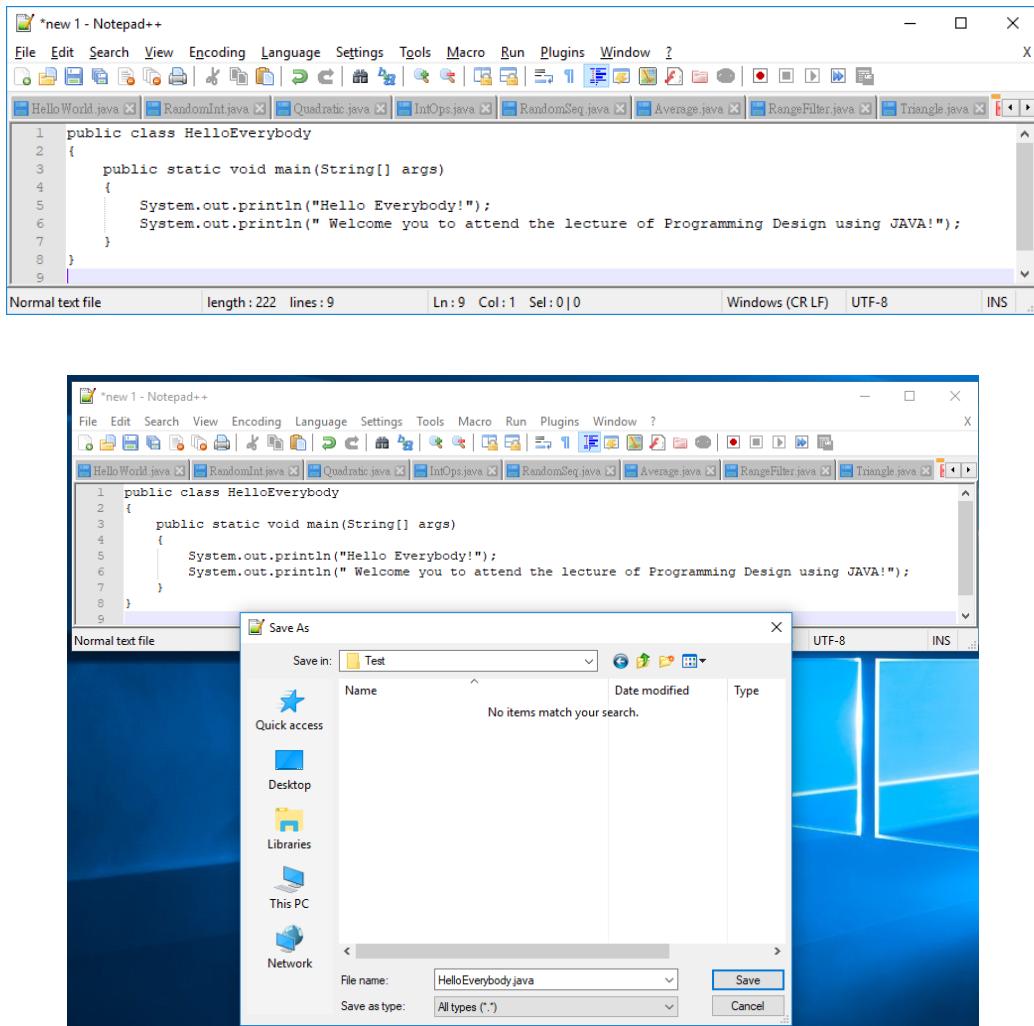
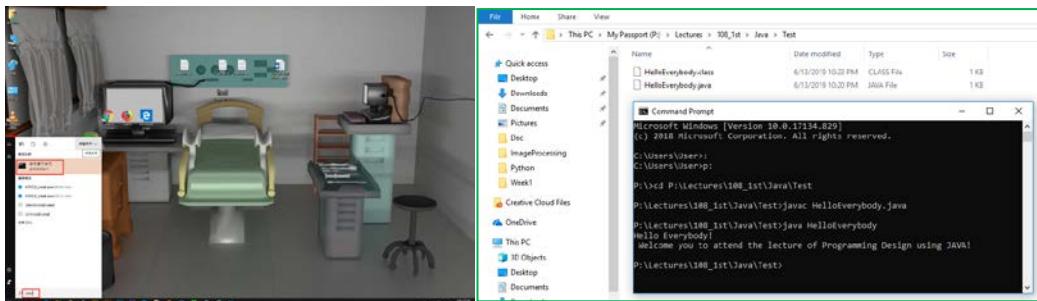


圖 3-1 撰寫 Java 測試檔以測試 JDK 是否安裝成功。



然後，根據檔案所儲存的位置，呼叫運行 DOS 應用程式，然後在“命令行”(cmd)依次輸入下表或下圖中所下的指令。

表 3-1 在“命令行”(cmd)下運行 Java 測試程式(Windows 10)的 Procedure 和結果內容。



Microsoft Windows [Version 10.0.17134.829]

(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\User>p:

P:>cd P:\Lectures\108\_1st\Java\Test

P:\Lectures\108\_1st\Java\Test>javac HelloEverybody.java

P:\Lectures\108\_1st\Java\Test>java HelloEverybody

Hello Everybody!

Welcome you to attend the lecture of Programming Design using JAVA!

P:\Lectures\108\_1st\Java\Test>

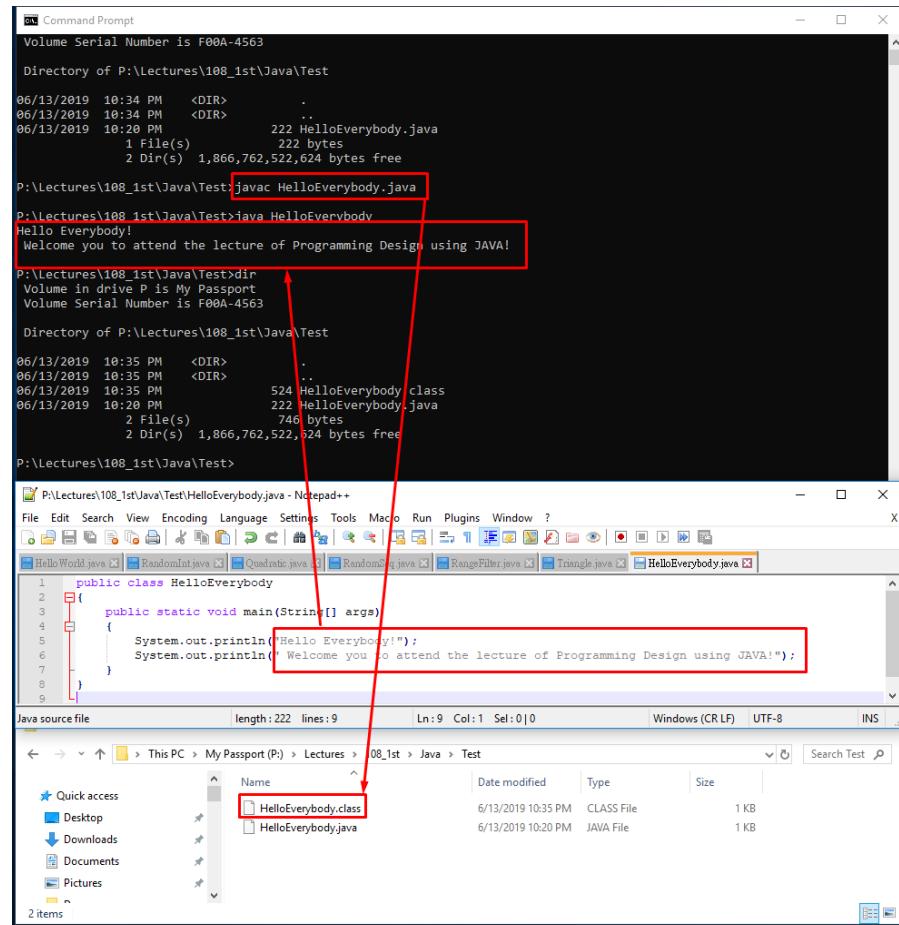


圖 3-2 在“命令行”(cmd)下運行 Java 測試程式(Windows 10)。

最後，如果出現上圖紅框中所標注的內容，則說明 JDK 的安裝和設定成功！

## 4. 注意

如果以後要安裝諸如 Eclipse, NetBean, 或 Borland JBuilder...等等集成開發環境(IDE, Integrated Development Environment), 應該在 IDE 中編譯運行一個簡單的類似上述 HelloEverybody 的程式, 以保證 IDE 可以識別出 JDK 的位置。

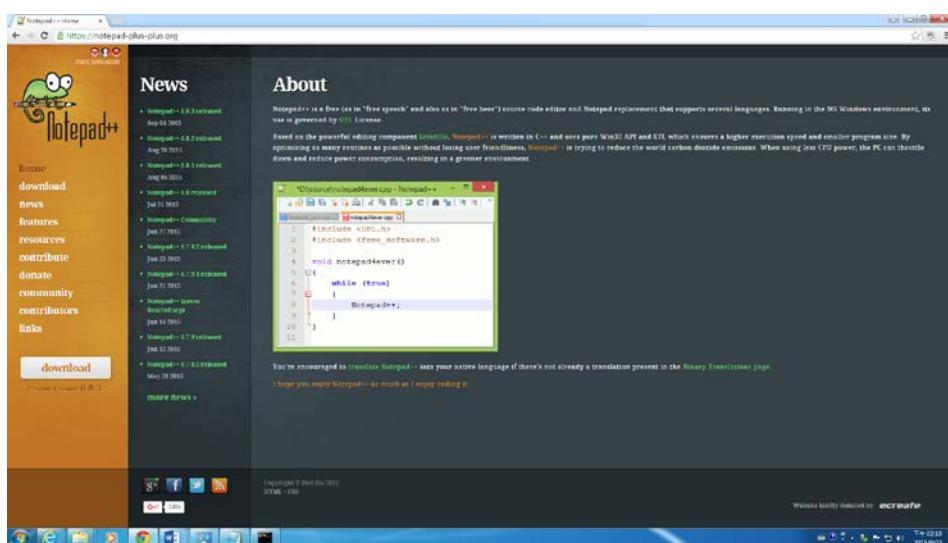
到此，終於完成 JAVA 的安裝與測試。

真的終於 哈哈哈 可以鬆一口氣了。

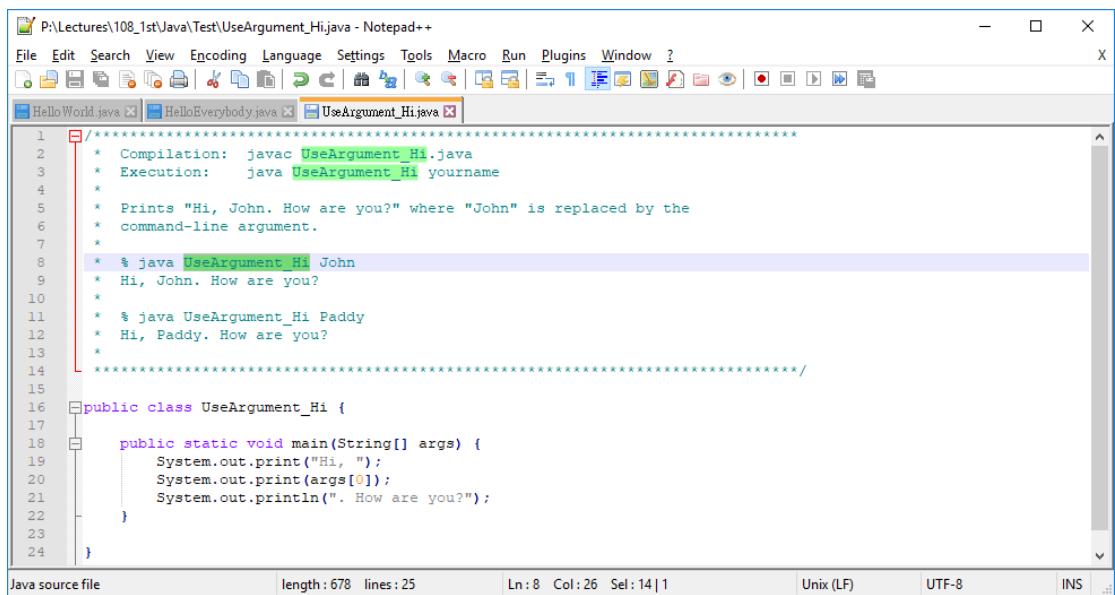
### Text Editor: Notepad++



<https://notepad-plus-plus.org/>



## More Test



A screenshot of the Notepad+ application window. The title bar shows "P:\Lectures\108\_1stJava\Test\UseArgument\_Hi.java - Notepad+". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, and Help. The toolbar contains various icons for file operations like Open, Save, Print, and Find. The main editor area displays the Java code for UseArgument\_Hi.java. The code includes a multi-line comment at the top and a main method that prints "Hi, " followed by the first command-line argument and ". How are you?". The code is highlighted in green and blue. Below the code, the status bar shows "Java source file", "length: 678 lines: 25", "Ln: 8 Col: 26 Sel: 14 | 1", "Unix (LF)", "UTF-8", and "INS".

```
1 ****
2 * Compilation: javac UseArgument_Hi.java
3 * Execution: java UseArgument_Hi yourname
4 *
5 * Prints "Hi, John. How are you?" where "John" is replaced by the
6 * command-line argument.
7 *
8 * % java UseArgument_Hi John
9 * Hi, John. How are you?
10 *
11 * % java UseArgument_Hi Paddy
12 * Hi, Paddy. How are you?
13 *
14 ****
15
16 public class UseArgument_Hi {
17
18     public static void main(String[] args) {
19         System.out.print("Hi, ");
20         System.out.print(args[0]);
21         System.out.println(". How are you?");
22     }
23 }
24 }
```

```
*****
* Compilation: javac UseArgument_Hi.java
* Execution: java UseArgument_Hi yourname
*
* Prints "Hi, John. How are you?" where "John" is replaced by the
* command-line argument.
*
* % java UseArgument_Hi John
* Hi, John. How are you?
*
* % java UseArgument_Hi Paddy
* Hi, Paddy. How are you?
*
*****
```

```
public class UseArgument_Hi {

    public static void main(String[] args) {
        System.out.print("Hi, ");
        System.out.print(args[0]);
        System.out.println(". How are you?");
    }
}
```

```
Command Prompt
C:\Users\User>p:
P:\>cd P:\Lectures\108_1st\Java\Test

P:\Lectures\108_1st\Java\Test>dir
 Volume in drive P is My Passport
 Volume Serial Number is F00A-4563

 Directory of P:\Lectures\108_1st\Java\Test

06/13/2019  10:34 PM    <DIR>      .
06/13/2019  10:34 PM    <DIR>      ..
06/13/2019  10:20 PM           222 HelloEverybody.java
                           1 File(s)   222 bytes
                           2 Dir(s)  1,866,762,522,624 bytes free

P:\Lectures\108_1st\Java\Test>javac HelloEverybody.java

P:\Lectures\108_1st\Java\Test>java HelloEverybody
Hello Everybody!
  Welcome you to attend the lecture of Programming Design using JAVA!

P:\Lectures\108_1st\Java\Test>dir
 Volume in drive P is My Passport
 Volume Serial Number is F00A-4563

 Directory of P:\Lectures\108_1st\Java\Test

06/13/2019  10:35 PM    <DIR>      .
06/13/2019  10:35 PM    <DIR>      ..
06/13/2019  10:35 PM           524 HelloEverybody.class
06/13/2019  10:20 PM           222 HelloEverybody.java
                           2 File(s)   746 bytes
                           2 Dir(s)  1,866,762,522,624 bytes free

P:\Lectures\108_1st\Java\Test>javac UseArgument_Hi.java
P:\Lectures\108_1st\Java\Test>java UseArgument_Hi MCLo
Hi, MCLo. How are you?

P:\Lectures\108_1st\Java\Test>java UseArgument_Hi Paddy
```

