

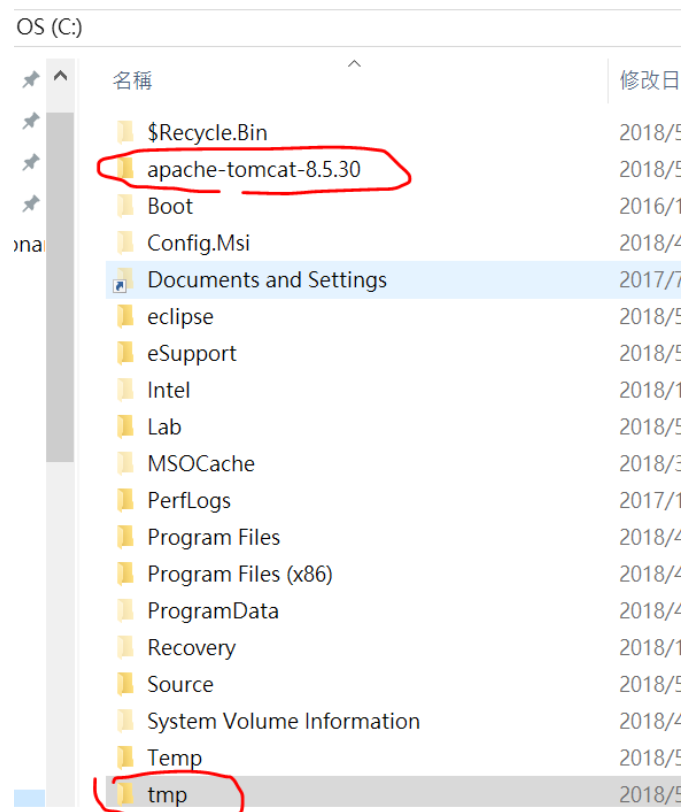
一、SpotBug

1. 下載專案檔，解壓縮到 `c:\Wtmp`

<http://www.cc.ntut.edu.tw/~jykuo/train/tmp.zip>

2. 下載 Tomcat 8，解壓縮 到 `c:\W`

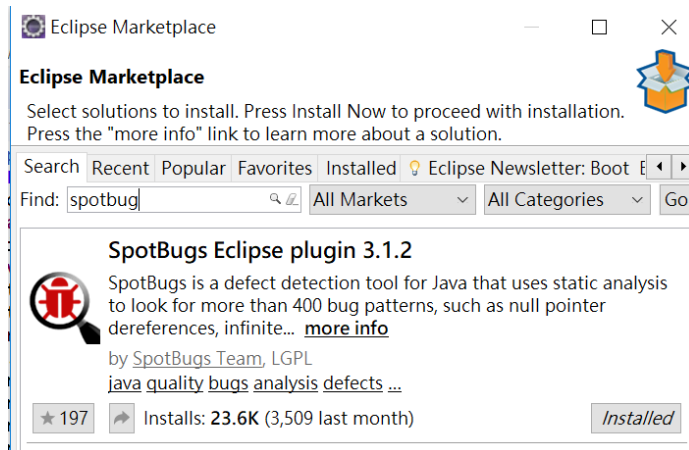
<http://ftp.mirror.tw/pub/apache/tomcat/tomcat-8/v8.5.30/bin/apache-tomcat-8.5.30-windows-x64.zip>



3. 啟動Eclipse，工作區設定於 `c:\Wtmp\workspace`

https://www.dropbox.com/s/esec3znqovdmlo5/eclipse-jee-neon-3-win32-x86_64.zip?dl=0

Help–Marketplace 安裝 SpotBug

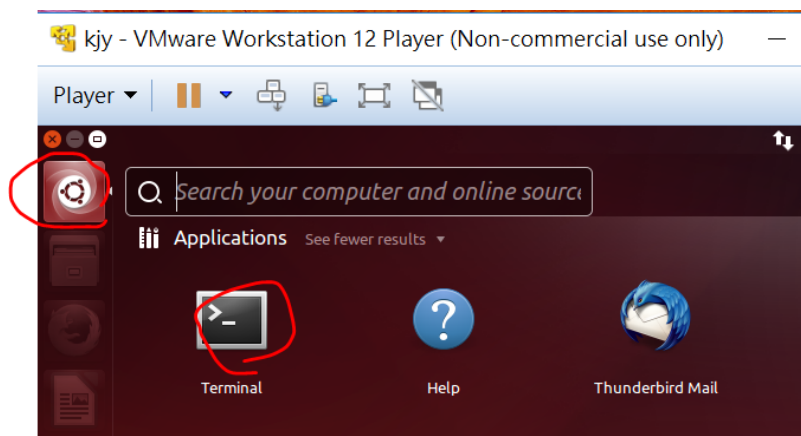


4.啟動 VMWare player

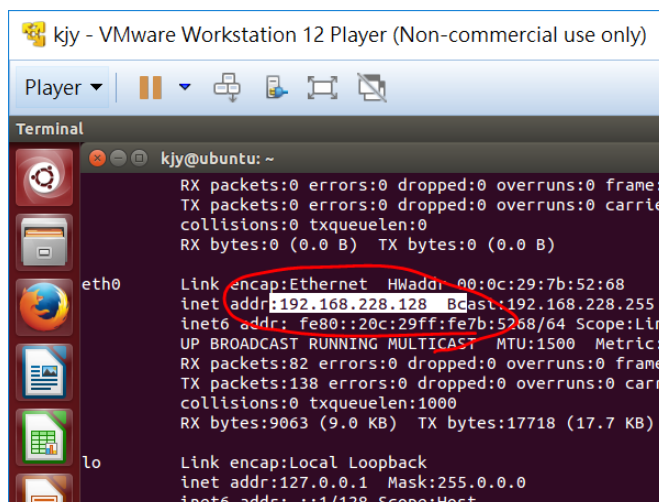
open virtual machine

選VM play

帳密 kji/kji



在 terminal 下指令 查詢 VM IP, ifconfig, 192.168.228.128



啟動 sonarqube

在 **terminal** 輸入指令

```
sudo docker start sonarqube
```

輸入 **superuser** 密碼 **kjy** (輸入密碼不會顯示)

5. 在個人電腦端瀏覽器啟動 **JENKIN** 控制畫面

192.168.228.128:8080

kjy/kjy

6. 在個人電腦端瀏覽器啟動 **SONARQUBE** 控制畫面

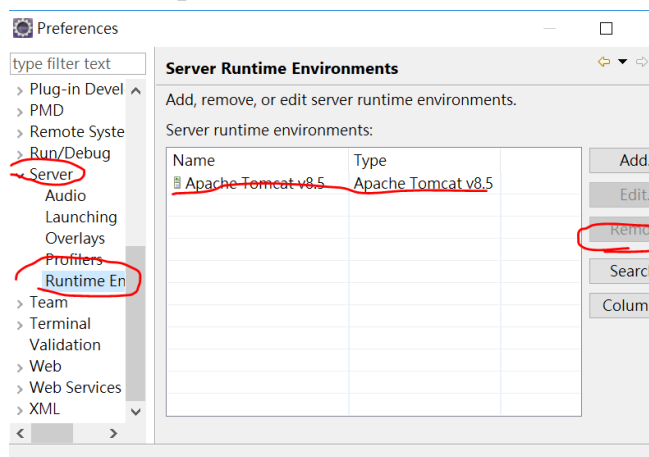
192.168.228.128:9000

admin/admin

7. 安裝 Eclipse TOMCAT SERVER

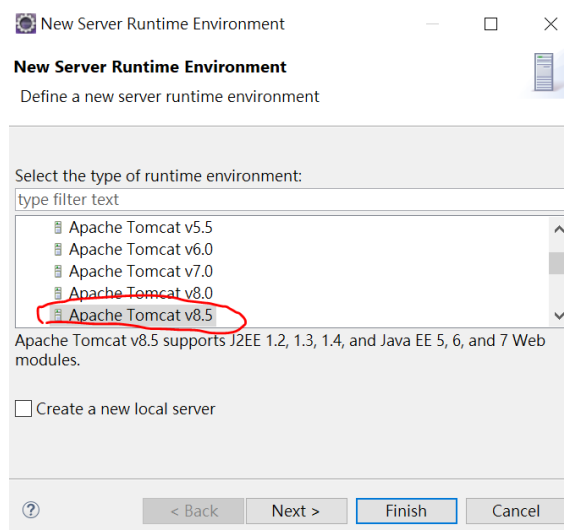
選單

Windows - preference

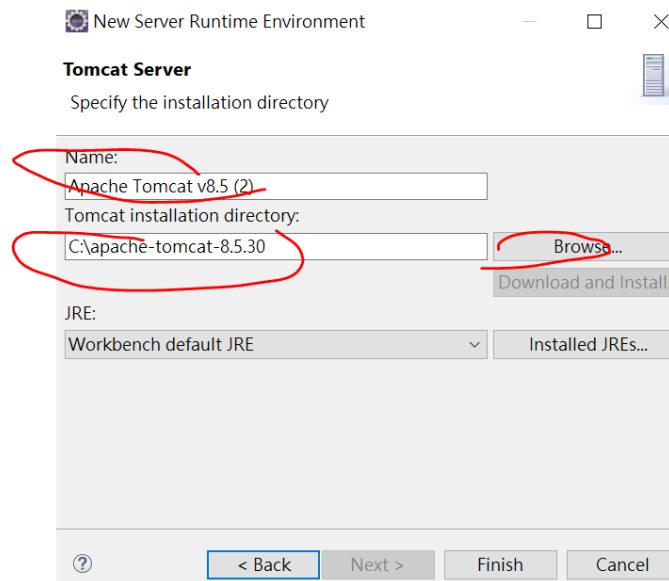


remove 原本 Tomcate 8.0

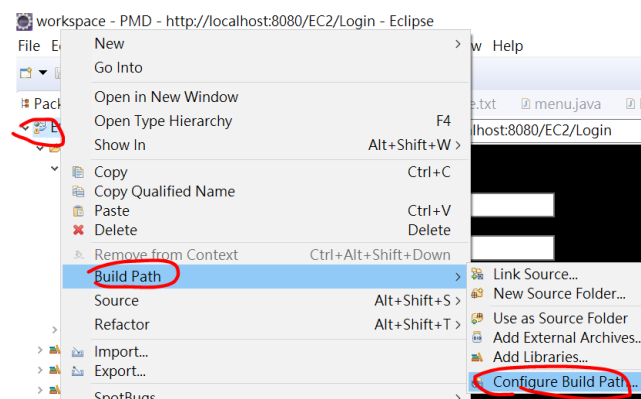
Add Tomcate 8.5



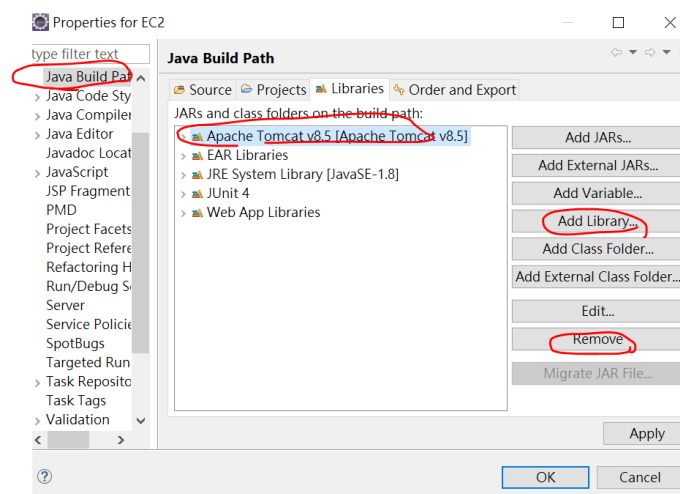
選剛剛下載解壓縮目錄



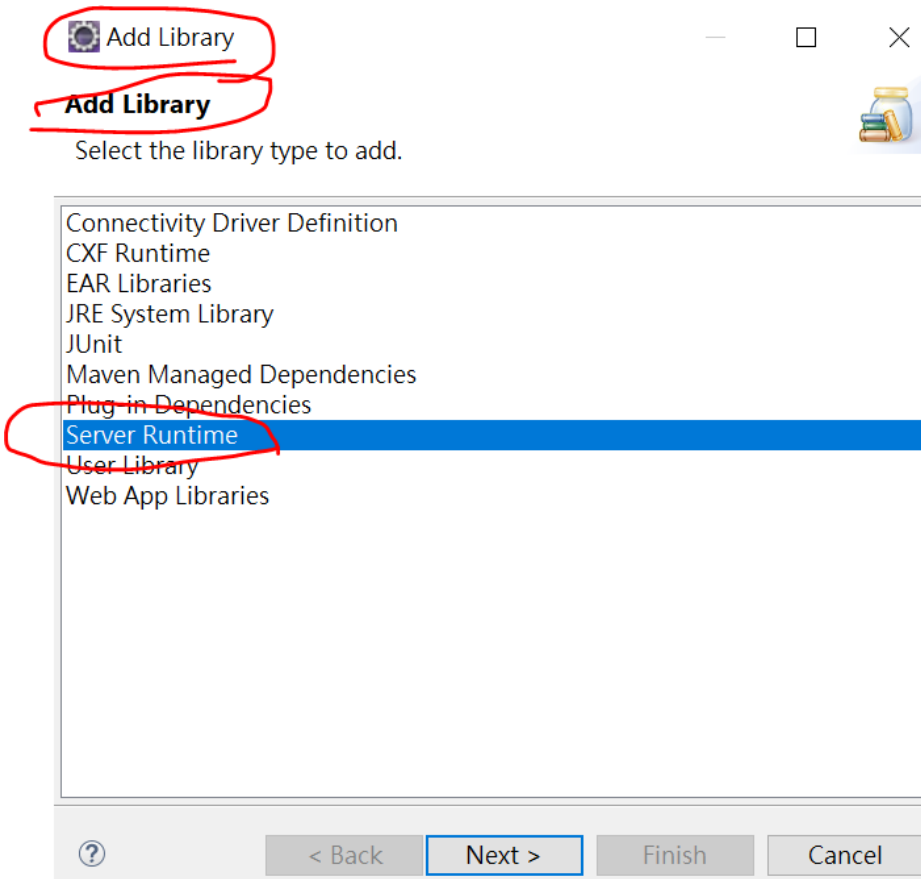
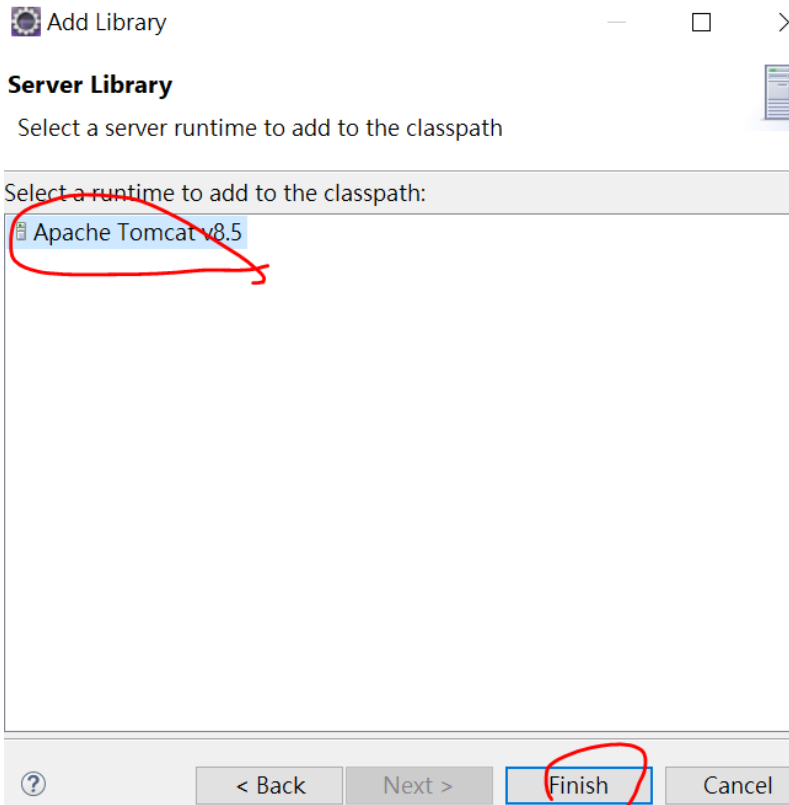
點選專案EC2按右鍵

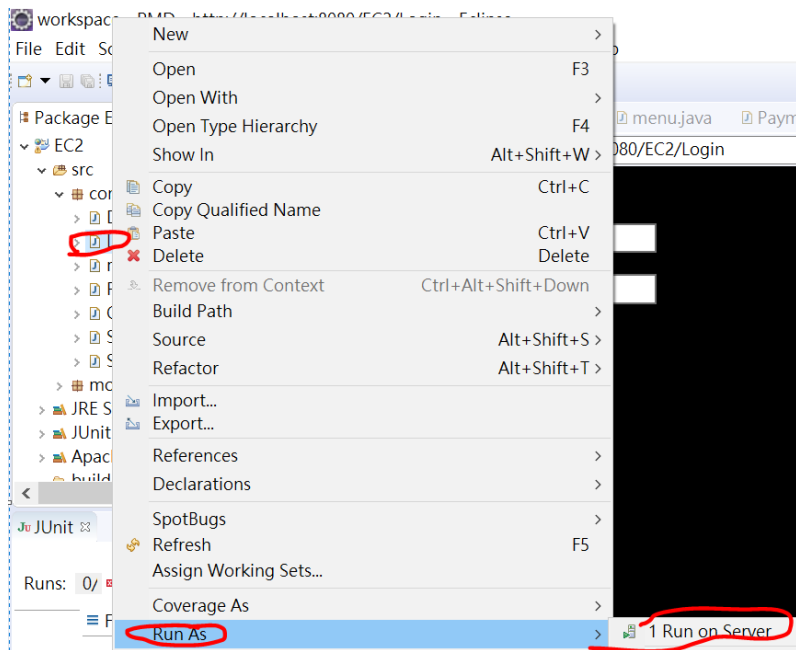


將原先 Tomcat 8.0的 library remove, 再add Library

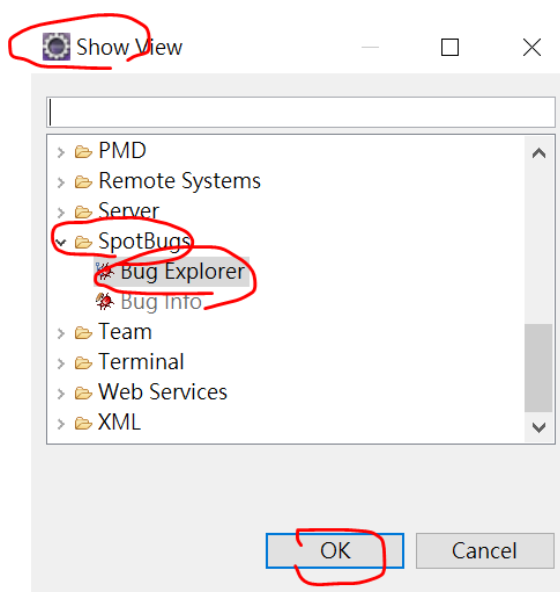
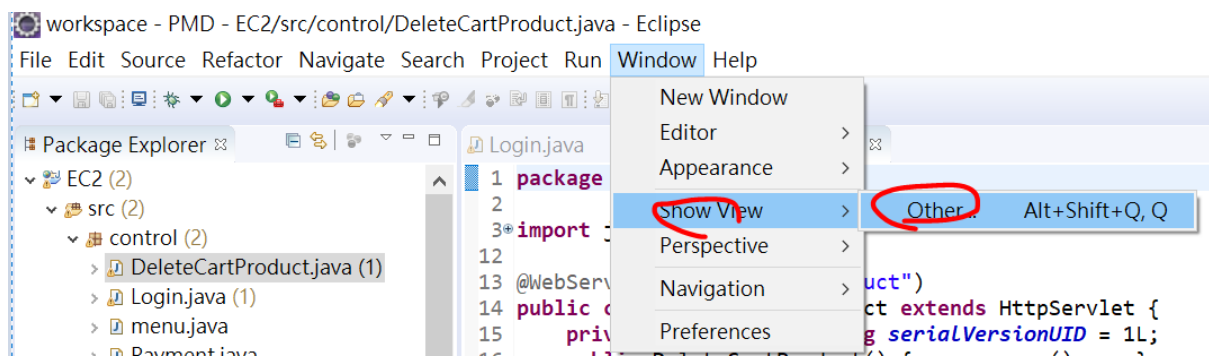


Add library - server runtime





4. 點選專案，右鍵執行 SpotBug – FindBug



5. Login.java有錯，修正 Customer, non serializable object...

(1)

```
public class Customer implements java.io.Serializable{
```

(2)

```
private static final long serialVersionUID = 1L;
```

(4)

```
public long getSerialVersionUID() { return serialVersionUID;}
```

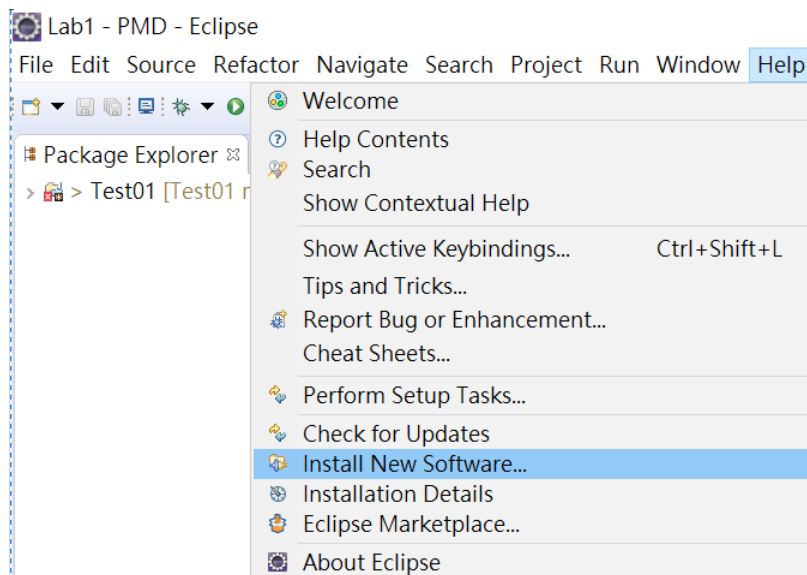
6.修正 try catch

(1)

```
catch(Exception e) { e.printStackTrace(); }
```

二、PMD

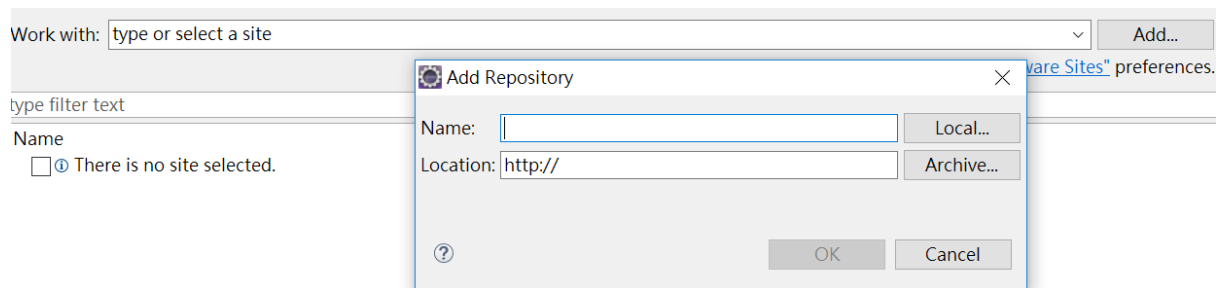
Help –> Install New Software...



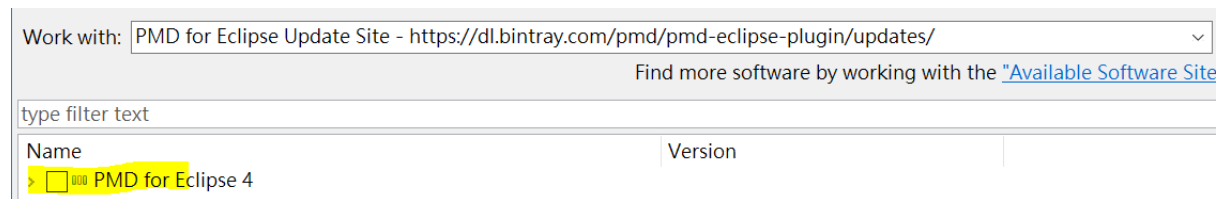
填入網址

Name: PMD for Eclipse Update Site

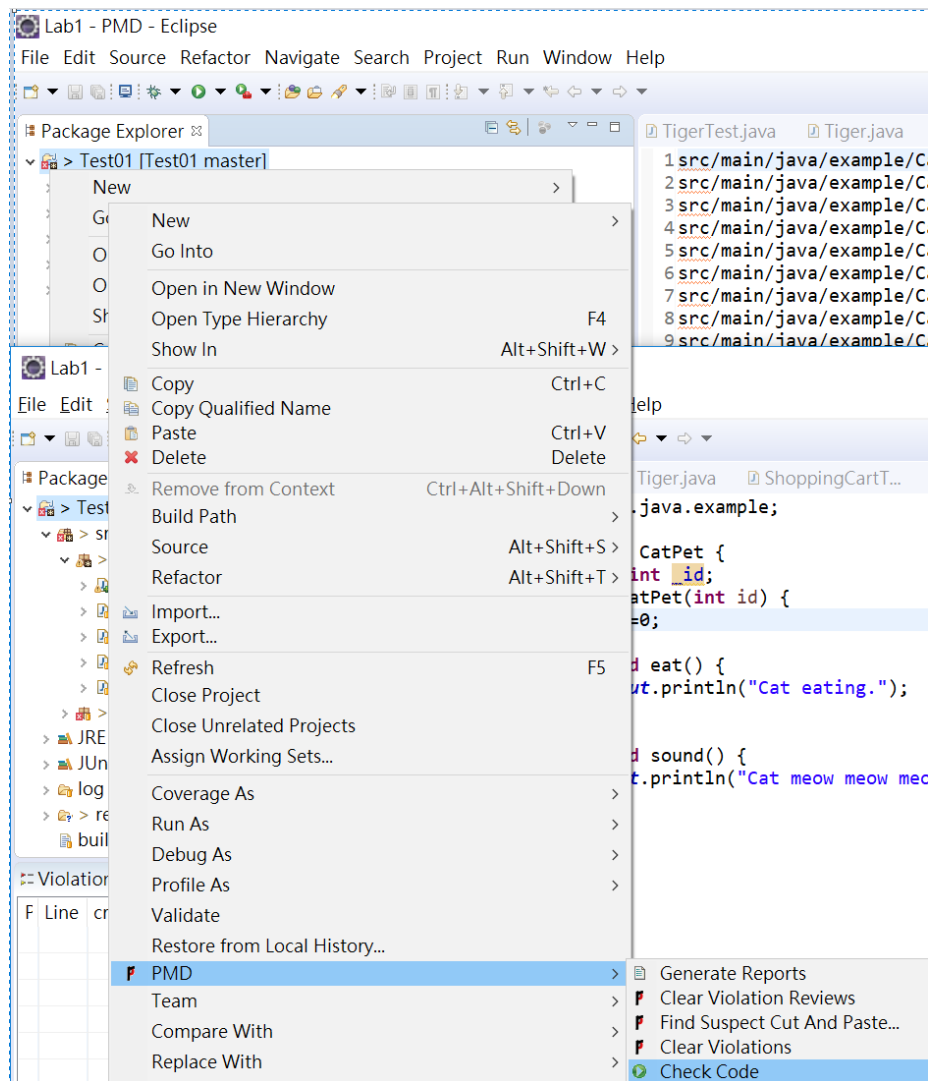
<https://dl.bintray.com/pmd/pmd-eclipse-plugin/updates/>



勾選 **PMD**，安裝



按專案右鍵，**PMD**，執行**check**



顯示結果

- PMD - Test01/src/main/java/example/CatPet.java - Eclipse

