【2016 JAVA物件導向程式設計Homework 9】
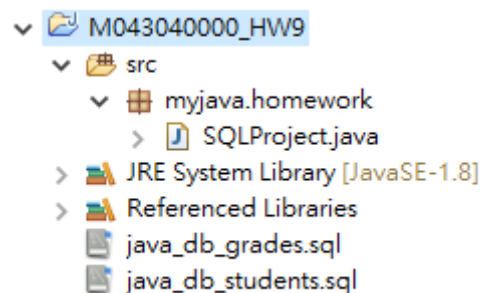
● 注意事項

1. 請使用JAVA 語言，配合Eclipse 寫本次作業並進行測試，並安裝、使用JAVA SE Development Kit(JDK) 8 函式庫。

2. 請依據作業規定設定Eclipse 專案名稱與package name，若未依照規定將根 狀況扣分。

3. 嚴禁抄襲其他同學作業，參與者(抄襲與被抄襲)皆以零分計算。

4. 請對你的程式碼有深入瞭解，demo 時助教會問。

5. 對題目有問題可以寄信問助教群(java_ta@net.nsysu.edu.tw)或是到實驗室 (EC5018)詢問，但不幫忙debug。

6. 逾期以零分計算，不接受補交，有任何因素導致無法如期繳交，請事先告知

7. Demo 時間會另外通知。

● 作業規定與上傳

1. Eclipse 專案名稱：Student ID_HW9

2. Package path：請參考右圖

3. 作業請繳交專案之tar或zip archive並上傳至網路大學。

請於2016年5月18日(週三)23:59前上傳完畢，逾期以零分計算，不接受補交，有任 何因素導致無法如期繳交，有問題請事先告知，再次強調，Demo時間會另外通 知。

4. You need not add your .sql to your homework archive.

In this homework, you need to install a MySQL database and import the specific tables. If JDBC (Java Database Connectivity) used, you also have to install MySQL Connector/J. You can use JDBC API to connect your database with your program, then finish the following query and print out the results on your program.

At first, you have to make user provide the account and password of the MySQL database to build the connection. You should import two tables provided, named "students" and "grades". In order to avoid some troubles, you have better to name your database as "java_db" and keep your database port number as 3306.

In the tables,
"students" has three fields: **id** is the student's name
sex is the gender of student, M for male, F for female
birthmonth is the month of the student's birthday
"grades" has four fields: **id** is the student's name
chinese is the grade of Chinese of the student
math is the grade of math of the student
english is the grade of English of the student

1. Find out the **id** and **birthmonth** which sex is 'M' in the table "students."
2. Find out the **id**, **math** and **chinese** which math is over 90 and chinese is over 80 in the table "grades."
3. Find out the **max of chinese**, **min of math** and **the average of english** in the table "grades."
4. Find out the **id**, **sex** and **their grade of English** which his or her grade of English is over 50 in the table "students" and "grades"; finally, make the order with the grade of English from highest to lowest.
5. Find out the **id** and **the average grade of each id** in the table "grades."
   The average grade of each id means (math+chinese+english)/3.
6. Find out the **birthmonth** and **the count of birthmonth** which count is more than 1 in the table "students."

The output as follows:

```
Please enter useraccount:
java
Please enter password:
java
Connection establish

Query 1 result:

           id    birthmonth

         Mike             1
         Andy             6
          Wei             6
          Jim             8
      Michael             9
         Wolf             9
         Akai            12

Query 2 result:

           id       math      chinese

        Annie        100           90
         Judy         98           95
         Wolf        100          100

Query 3 result:

        c_max      m_min        e_avg

          100          6      62.3000

Query 4 result:

           id        sex      english

         Judy          F           91
      Michael          M           90
        Annie          F           80
          Wei          M           80
          Jim          M           73
       Cookie          F           60
         Wolf          M           60

Query 5 result:

           id   grade_avg

         Akai     33.3333
         Andy     45.0000
        Annie     90.0000
       Cookie     60.0000
          Jim     64.3333
         Judy     94.6667
      Michael     33.6667
         Mike      7.6667
         Wolf     86.6667
          Wei     73.3333

Query 6 result:

   birthmonth        count

            6            2
            9            4
```