

**COMP 3005**  
**Assignment #4**  
**Due: November 16**

**Instruction**

1. You should do the assignments independently. Copying is not allowed.
2. You need to download and install Oracle VM for this assignment. Detail about how to install and use Oracle VM can be found in the file [Oracle-VM.doc](#).
3. Submit your assignment as a single word/PDF document on culearn.

**Part 1. Create the database (15 marks)**

Given the **Person-Hobby** database shown below where the primary keys are underlined and foreign keys are obvious. Use SQL DDL to create on the three relation with primary keys and foreign keys properly defined. Put your DDL statements into the file to be submitted.

**Person**

<u>P#</u>	Name	Age
P1	Smith	20
P2	Jones	30
P3	Blake	25
P4	<i>Lastname</i>	20
P5	Adams	30

**Hobby**

<u>H#</u>	Name
H1	Bowling
H2	Chess
H3	Dancing
H4	Hiking
H5	Skating
H6	Ski

**Play**

<u>P#</u>	<u>H#</u>	Times
P1	H1	3
P1	H2	2
P1	H3	4
P1	H4	2
P1	H5	1
P1	H6	1
P2	H1	3
P2	H2	4
P2	H3	5
P2	H4	2
P3	H2	2
P3	H3	3
P4	H2	3
P4	H3	4

**Part 2. Populate the database (15 marks)**

Use the information shown in the tables above to populate the database created in Part 1. Make sure *Lastname* in the Person table is replaced with your own last name. Failure to do so will result in getting 0 for this assignment. Put your SQL DML statements into the file to be submitted.

**Part 3. Query the database (70 marks)**

Use SQL QL to express the following queries. Each query is 4 marks and the result is 1 mark. Put the screenshots with both the query and the result into the file to be submitted.

1. Get the names of hobbies that "*lastname*" plays.
2. Get the names of persons who play Bowling.
3. Get the names of persons who play a hobby more than 3 times.
4. Get the names of persons who play either chess or dancing.
5. Get the names of persons who play both chess and dancing.

6. Get the person name/hobby name pairs such that the indicated person plays the indicated hobby.
7. Get the names of persons who do not play Ski.
8. Get the names of persons who do not play any hobby.
9. Get the names of persons who play all hobbies.
10. Get the names of persons who play all hobbies that "*lastname*" plays.
11. Get the names of persons who play only all the hobbies that "*lastname*" plays.
12. Get the names of persons who play all hobbies except Skating and Ski.
13. Get the names of persons who play hobbies, the number of hobbies and total number of times they play those hobbies.
14. Get the names of persons who play hobbies but play the least number of hobbies.