

Contents

MySQL Questions	2
Question A (MySQLQA.txt)	2
Question B (MySQLQB.txt)	3
Question C (MySQLQC.txt)	4
Question D (MySQLQD.txt)	5
Neo4j Questions	6
Question A (Neo4jQA.txt)	6
Question B (Neo4jQB.txt)	7
Question C (Neo4jQC.txt)	8
Question D (Neo4jQD.txt)	9

MySQL Questions

Import the MySQL database as described in section 4.1 MySQL, of the Final Project Specification and write queries to satisfy the following.

Write only the exact MySQL command for each question into the appropriate file.

Question A (MySQLQA.txt)

Show the number of directors (as “Number of Directors”) from each country (as “Country”) that have directed Oscar winning films.

The results should be sorted alphabetical by “Country”.

Number of Directors	Country
4	Canada
1	Japan
1	Mexico
6	New Zealand
3	Taiwan
1	United Kingdom
33	United States

7 rows in set (0.00 sec)

Figure 1 Example of output required for Question A

Question B (MySQLQB.txt)

Show the names of the studios (as "Studio") that released films that "Tom Cruise" has acted in.

The results should be sorted alphabetical by "Studio".

```
+-----+  
| Studio |  
+-----+  
| Paramount Pictures |  
| Warner Bros. Pictures |  
+-----+  
2 rows in set (0.00 sec)
```

Figure 2 Example of output required for Question B

Question C (MySQLQC.txt)

Show the name of each actor born between 1960 and 1965 inclusive (as "Actor"), and the genre (as "Genre") and film name (as "Film") of films they acted in.

The results should be sorted alphabetical by "Actor", within that alphabetically by "Genre" and within that alphabetically by "Film".

Actor	Genre	Film
Andy Serkis	Other	King Kong
Brad Pitt	Other	Ocean's Eleven
Brad Pitt	Other	Troy
Brad Pitt	Romantic	Mr. and Mrs. Smith
Chris Rock	Other	Bee Movie
Chris Rock	Other	Lethal Weapon 4
Don Cheadle	Other	Ocean's Eleven
George Clooney	Drama	The Perfect Storm
George Clooney	Other	Ocean's Eleven
Hiroiyuki Sanada	Other	Sunshine
Hiroiyuki Sanada	Other	The Last Samurai
Hugo Weaving	Other	The Matrix Reloaded
Hugo Weaving	Other	The Matrix Revolutions
Hugo Weaving	Other	Transformers
Jet Li	Other	Lethal Weapon 4
John C. Reilly	Drama	The Perfect Storm
Johnny Depp	Muscial	Charlie and the Chocolate Factory
Keanu Reeves	Other	The Matrix Reloaded
Keanu Reeves	Other	The Matrix Revolutions
Laurence Fishburne	Other	Mission: Impossible III
Laurence Fishburne	Other	The Matrix Reloaded
Laurence Fishburne	Other	The Matrix Revolutions
Matthew Broderick	Other	Bee Movie

Figure 3 Example of output required for Question C

Question D (MySQLQD.txt)

Show the film name (as "Film") for all films where the director is from the "United Kingdom", and a column entitled "Cast" that contains:

- "Small" if the cast is less than 5
- "Medium" if the cast is between 5 and 9
- "Large" if the cast is 10 or greater.

The results should be sorted alphabetical by "Film".

Film	Cast
Harry Potter and the Goblet of Fire	Medium
Sunshine	Small
Tomorrow Never Dies	Medium
Waterworld	Small

4 rows in set (0.00 sec)

Figure 4 Example of output required for Question D

Neo4j Questions

Import the Neo4j database as described in section 4.2 Neo4j, of the Final Project Specification and write queries to satisfy the following.

Write only the exact Neo4j command for each question into the appropriate file.

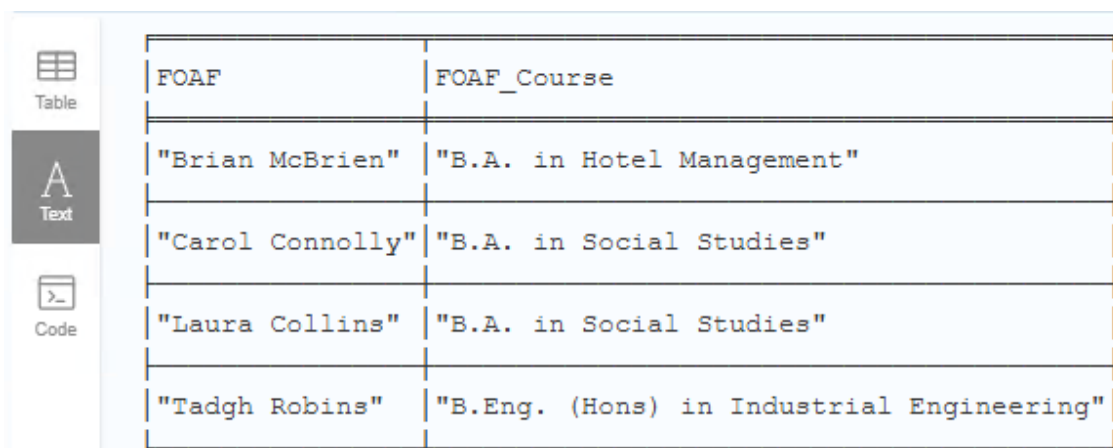
Question A (Neo4jQA.txt)

Return all friend-of-a-friends of student with the sid TUS-L017 (as “FOAF”) and the name of the course the friend-of-a-friend is studying (as “FOAF_Course”).

The results should be sorted alphabetical by “FOAF”, and within that alphabetically by “FOAF_Course”

(NOTE: A friend-of-a-friend is someone who is friends with a friend of a person, but not with the friend themselves.

In the following example, “Tadgh Robins” is a FOAF of “Fiona Murphy”, but “Clodagh Murphy” is not a FOAF of “Fiona Murphy”; because “Clodagh Murphy” has a direct friendship with “Fiona Murphy”, but “Tadgh Robins” does not).



The image shows a screenshot of a Neo4j query result interface. On the left, there is a sidebar with three icons: a table icon labeled 'Table', a text icon labeled 'Text', and a code icon labeled 'Code'. The 'Table' icon is selected. The main area displays a table with two columns: 'FOAF' and 'FOAF_Course'. The table contains five rows of data, sorted alphabetically by the 'FOAF' column. The data is as follows:

FOAF	FOAF_Course
"Brian McBrien"	"B.A. in Hotel Management"
"Carol Connolly"	"B.A. in Social Studies"
"Laura Collins"	"B.A. in Social Studies"
"Tadgh Robins"	"B.Eng. (Hons) in Industrial Engineering"

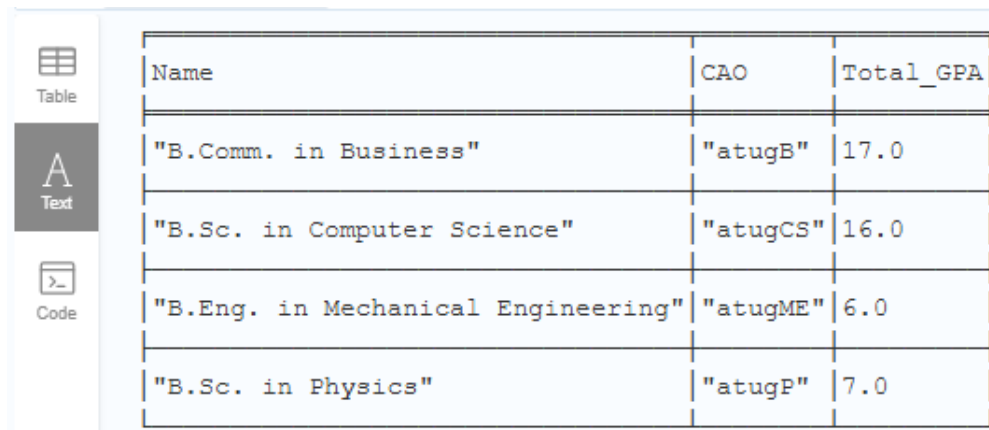
Figure 5 Example of output required for Question A

Question B (Neo4jQB.txt)

Return the course name (as “Name”), the course cao (as “CAO”), and the total gpa for students studying that course (as “Total_GPA”), for all courses with students studying them in the Location Galway.

“Total_GPA” should be rounded to the nearest whole number.

The results should be sorted alphabetical by “CAO”.



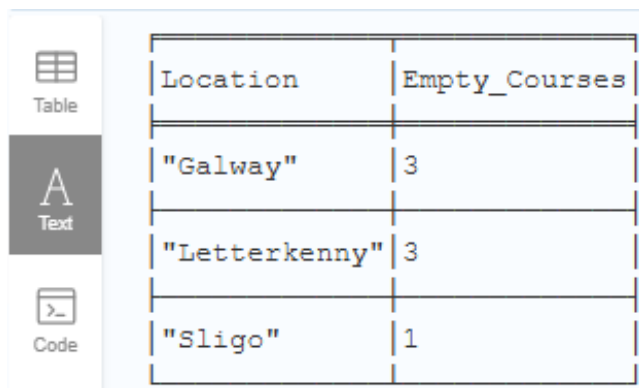
Name	CAO	Total_GPA
"B.Comm. in Business"	"atugB"	17.0
"B.Sc. in Computer Science"	"atugCS"	16.0
"B.Eng. in Mechanical Engineering"	"atugME"	6.0
"B.Sc. in Physics"	"atugP"	7.0

Figure 6 Example of output required for Question B

Question C (Neo4jQC.txt)

Return the location (as "Location") and the number of courses with no students studying them (as "Empty_Courses") for each location in the Institution "Atlantic Technological University"

Results should be returned in descending "Empty_Courses" order, and within that alphabetically by "Location".



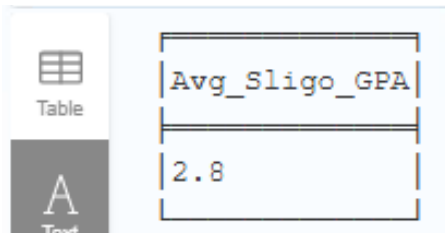
Location	Empty_Courses
"Galway"	3
"Letterkenny"	3
"Sligo"	1

Figure 7 Example of output required for Question C

Question D (Neo4jQD.txt)

Return the average gpa (as "Avg_Sligo_GPA") for students in the Location "Sligo".

"Avg_Sligo_GPA" should be rounded to 1 decimal place e.g. 1.22 should be rounded to 1.2, and 1.25 should be rounded to 1.3.



Avg_Sligo_GPA
2.8

Figure 8 Example of output required for Question D