**Data Management: Assignment 1 – SQL, Data Importing and Views**

This exercise is part of the formal assessment of the course, and the work done must be your own. You are reminded to read the section on Cheating and Plagiarism in your student handbook. The marks for each question are shown in brackets.

Download the files hotels.sql and DataManagement\_CA1\_template\_01.doc from the Assessments section within MyAberdeen, and saving both files to your university H: drive.

The file hotels.sql contains the script required to create tables that describe the hotels managed by the Hotels Company along with the rooms and entertainment available in each hotel, and tables that describe the hotel customers and the room bookings the customers have made. Please refer to practical 3, for creating a database on the university MySQL server mysql.abdn.ac.uk. (Since you have already created a MySQL account, you only need to create a new database). Again use the procedure described in practical 3 to import the Hotels database tables and data contained in hotels.sql to your newly created database. Inspect your database to check if all the required content is imported. If you are not happy with the import, it is best to drop all the tables and import tables and data again.

The file *DataManagement\_CA1\_template\_01.doc* contains a template Word document, which you should use to submit your answers. For descriptive questions type your answers directly into the submission template. Alternatively you could import graphics created using other programs (such as PowerPoint, Paint, etc.) into the submission template.

**Part 1**

Import the hotels.sql into your MySQL database. (5)

Create SQL statements for the following requirements.

1. Write a query to show the total number of single rooms at each hotel (listed as HotelNo). Hint: The

GROUP BY clause can refer to more than one column name. (5)

1. Extend your answer to question 1 above to show only hotels (listed as HotelNo) with 4 or more family

or double rooms, listed in ascending order of number of rooms. (5)

1. Without using any JOIN keywords, write a query to show the names and addresses of all customers who have made hotel bookings along with the name and location of the hotel(s) for which they have a booking. Use table aliases to simplify your answer. (6)
2. Write a query to calculate the bill for Fred Flounder. Your query should find the appropriate room rate

for Fred's hotel room and multiply the rate by the number of nights of his booking. Your result table should have a single row that shows Fred's name and address, and the total cost of his booking. Use table aliases to simplify your answer. (6)

Within MySQL, create a view for each of the SQL statements above. Ensure each view is named sensibly. (8)

**Part 2**

1. Write a 1000 word critique of the hotel database based on how good/poor you feel the database is. Your answer should include (along with other aspects) the quality of the data, the organization of the tables, fields, keys, etc. Marks will also be awarded for supporting your arguments with evidence (for example peer-reviewed literature). Ensure you include your report in the template provided. (15)

Please zip your solutions document and name it with your name appended to DataManagement\_CA1 (e.g. DataManagement\_A2\_ \_NigelBeacham.zip). Upload the zip file to MyAberdeen by selecting the Data Management CA1 link in the Assessment section. In the subject field type only ‘Data Management CA1’ and nothing else. Please follow all the submission instructions to help us mark your coursework efficiently.