**Restaurant SQL setup**

RESTAURANT DATABASE SCENARIO

A restaurant has several rooms, each managed by a Headwaiter. Waiters work in teams, usually under the same Headwaiter. Headwaiters do not serve at tables. Headwaiters manage different rooms on different days.

The SQL code to create the database and populate the data can be found in the file “restaurant\_setup.sql”.

The attribute 'Headwaiter’ is the Staff\_No of a Headwaiter. – weird but ok fine

Headwaiters have null values for the attribute ‘Headwaiter’ in the Staff table. – this is weird

The attribute 'Waiter\_No’ is the Staff\_No of the waiter who serves the customer.

Dates are stored as numbers which correspond to YYMMDD, eg 12th March 2016 is stored as 160312.

The attribute 'Covers' is the number of people served at the table.

Each task asks you to write several queries by using the tools explained in the corresponding topic. Please, use only them. The sql file with answers for the corresponding task should be of the following format:

-- 1

SELECT ….

-- 2

SELECT ….

-- 3

SELECT …

…

And so on. So, each query should have preceding “-- <id>”. (basically label each statement number for each question. If question 5 for example needs 3 statements, label the statements as above)

Specify SQL queries to satisfy the following:

1. List the dates and bill totals for customer Bob Crow.

--1

select bill\_date,bill\_total from restbill where cust\_name = "Bob Crow";

1. List the names of all customers whose last name is Smith. List each customer only once.

--1

select distinct cust\_name from restbill where cust\_name LIKE "%Smith";

1. List the names of all customers whose second names begin with 'C'. List each customer only once.

--1

select distinct cust\_name from restbill where cust\_name LIKE "% C%";

1. List the names of all the headwaiters.

--1

select distinct first\_name,surname from reststaff where headwaiter is NULL;

1. List all the details of bills dated February 2016.

–1

select \* from restbill where bill\_date > "160200" AND bill\_date < "160230";

1. List the dates the restaurant took money in 2015. List each date only once

--1

select distinct bill\_date from restbill;

1. How much money has the restaurant taken? Change the name of the output column to 'Income'.

--1

select sum(bill\_total) as Income from restbill;

1. How much money did the restaurant take in February 2016? Change the name of the output column to 'Feb Income'.

--1

select sum(bill\_total) "Feb Income" from restbill where bill\_date > "160200" AND bill\_date < "160300";

1. List the names of the waiters who have served the customer Tanya Singh.
2. On which dates in February 2016 did the Headwaiter 'Charles' manage the 'Green' room? You may output dates in the format they are stored.
3. List the names of the waiters who serve tables in the same team as the waiter Zoe Ball.
4. List the customer name, the amount they spent and the waiter’s name for all bills. Order the list by the amount spent, highest bill first.
5. List the names of customers who spent more than 450.00 on a single bill on occasions when ‘Charles’ was their Headwaiter.
6. A customer called Nerida has complained that a waiter was rude to her when she dined at the restaurant on the 11th January 2016. What is the name of the Headwaiter who will have to deal with the matter?
7. What is the name of the customer with the smallest bill? List only one name in your answer.
8. Which waiters have taken 2 or more bills on a single date? List the waiter names, the dates and the number of bills they have taken.
9. List the rooms with tables that sit more than 6 people and how many of such tables they have.
10. List the names of the rooms and the total amount taken on bills in each room.
11. List the headwaiter’s name sequence and the total bill amount their waiters have taken. Order the list by total bill amount.
12. List any customers who have spent, on average, more than £400 each time they have visited the restaurant.
13. Which waiters have taken 3 or more bills on a single date? List the waiter names and the number of bills they have taken.
14. List the names of any waiters who have not taken any bills.
15. Which customer has had the largest single bill? List the customer name, and the headwaiter and room name where they were served on that occasion.