***SQL Script Submission***

Welcome to the SQL mini project. For this project, you will use Springboard' online SQL platform, which you can log into through the following link: <https://sql.springboard.com/>

Username: student Password: learn\_sql@springboard

The data you need is in the "country\_club" database. This database contains 3 tables:

i) the "Bookings" table,

ii) the "Facilities" table, and

iii) the "Members" table.

Note that, if you need to, you can also download these tables locally. In the mini project, you'll be asked a series of questions. You can solve them using the platform, ***but for the final deliverable, paste the code for each solution into this script, and upload it to your GitHub***. Before starting with the questions, feel free to take your time, exploring the data, and getting acquainted with the 3 tables. \*/ \*\*

/\* Q1: Some of the facilities charge a fee to members, but some do not. Please list the names of the facilities that do. \*/

SELECT name AS charging\_facilities

FROM Facilities

WHERE membercost != 0

/\* Q2: How many facilities do not charge a fee to members? \*/

SELECT COUNT(membercost) as non\_charging\_facilities

FROM Facilities

WHERE membercost= 0

/\* Q3: How can you produce a list of facilities that charge a fee to members, where the fee is less than 20% of the facility's monthly maintenance cost? Return the facid, facility name, member cost, and monthly maintenance of the facilities in question. \*/

SELECT facid, name, membercost,monthlymaintenance

FROM Facilities

WHERE membercost < 0.2 \* monthlymaintenance

/\* Q4: How can you retrieve the details of facilities with ID 1 and 5? Write the query without using the OR operator. \*/

SELECT \*

FROM Facilities

WHERE facid IN (1,5)

/\* Q5: How can you produce a list of facilities, with each labelled as ‘cheap' or 'expensive', depending on if their monthly maintenance cost is more than $100? Return the name and monthly maintenance of the facilities in question. \*/ This runs but the commas must be re-entered in their screen (repetitive problem).

SELECT name, monthlymaintenance,

CASE WHEN monthlymaintenance > 100 THEN ‘expensive’

ELSE ‘cheap’ END AS label

FROM Facilities

/\* Q6: You'd like to get the first and last name of the last member(s) who signed up. Do not use the LIMIT clause for your solution. \*/

SELECT firstname, surname, MAX( joindate ) AS newest\_member\_date

FROM Members

WHERE surname != 'Guest'

/\* Q7: How can you produce a list of all members who have used a tennis court? Include in your output the name of the court, and the (***DWW firstname and surname concatenated***) name of the member formatted as a single column. Ensure no duplicate data, and order by the member name. \*/

SELECT CONCAT (m.firstname,' ',m.surname) AS member,f.facid AS facility, f.name AS name

FROM Bookings b

JOIN Facilities f ON b.facid=f.facid

JOIN Members m ON m.memid=b.memid

WHERE f.facid IN (0,1)

GROUP BY member

ORDER BY member

/\* Q8: How can you produce a list of bookings on the day of 2012-09-14 which will cost the member (or guest) more than $30? Remember that guests have different costs to members (the listed costs are per half-hour 'slot'), and the guest user's ID is always 0. Include in your output the name of the facility, the name of the member formatted as a single column, and the cost. Order by descending cost, and do not use any subqueries.

SELECT f.name, CONCAT(m.firstname, ' ', m.surname) AS member,

CASE WHEN m.firstname LIKE '%guest' THEN f.guestcost \* b.slots

WHEN m.firstname NOT LIKE '%guest%' THEN f.membercost \* b.slots

END AS cost

FROM `Bookings` b

JOIN `Facilities` f ON b.facid = f.facid

JOIN `Members` m ON m.memid = b.memid

WHERE

b.starttime LIKE '2012-09-14%'

AND

(

CASE

WHEN m.firstname LIKE '%guest' THEN f.guestcost \* b.slots

WHEN m.firstname NOT LIKE '%guest%' THEN f.membercost \* b.slots

END

) > 30

ORDER BY cost DESC

/\* Q9: This time, produce the same result as in Q8, but using a subquery. \*/

To Come

/\* Q10: Produce a list of facilities with a total revenue less than 1000.

The output of facility name and total revenue, sorted by revenue. Remember that there's a different cost for guests and members! \*/

SELECT f.name AS facility\_name

FROM `Bookings` b

LEFT OUTER JOIN `Facilities` f ON b.facid = f.facid

GROUP BY f.name

HAVING SUM( IF( memid =0, guestcost, membercost ) \* slots ) <1000

LIMIT 0 , 30