

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

```
SELECT membercost, name
FROM country_club.Facilities
WHERE membercost != 0.0
```

membercost	name
5.0	Tennis Court 1
5.0	Tennis Court 2
9.9	Massage Room 1
9.9	Massage Room 2
3.5	Squash Court

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

```
SELECT membercost, name
FROM country_club.Facilities
WHERE membercost = 0.0
```

membercost	name
0.0	Badminton Court
0.0	Table Tennis
0.0	Snooker Table
0.0	Pool Table

/\* 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 country_club.Facilities
WHERE membercost < monthlymaintenance * 0.2
AND membercost != 0
```

	facid	name	membercost	monthlymaintenance
<input type="checkbox"/> Edit  Copy  Delete	0	Tennis Court 1	5.0	200
<input type="checkbox"/> Edit  Copy  Delete	1	Tennis Court 2	5.0	200
<input type="checkbox"/> Edit  Copy  Delete	4	Massage Room 1	9.9	3000
<input type="checkbox"/> Edit  Copy  Delete	5	Massage Room 2	9.9	3000
<input type="checkbox"/> Edit  Copy  Delete	6	Squash Court	3.5	80

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

```
SELECT *
FROM country_club.Facilities
WHERE facid IN (1,5)
```

+ Options

	facid	name	membercost	guestcost	initialoutlay	monthlymaintenance
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Tennis Court 2	5.0	25.0	8000	200
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Massage Room 2	9.9	80.0	4000	3000

/\* 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. \*/

```
SELECT name, monthlymaintenance,
CASE
    WHEN monthlymaintenance > 100 THEN 'expensive'
    ELSE 'cheap'END AS classification
FROM country_club.Facilities
```

name	monthlymaintenance	classification
Tennis Court 1	200	expensive
Tennis Court 2	200	expensive
Badminton Court	50	cheap
Table Tennis	10	cheap
Massage Room 1	3000	expensive
Massage Room 2	3000	expensive
Squash Court	80	cheap
Snooker Table	15	cheap
Pool Table	15	cheap

/\* 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 surname, firstname, joindate
FROM country_club.Members
ORDER BY joindate DESC
```

surname	firstname	joindate
Smith	Darren	2012-09-26 18:08:45
Crumpet	Erica	2012-09-22 08:36:38
Hunt	John	2012-09-19 11:32:45
Tupperware	Hyacinth	2012-09-18 19:32:05
Purview	Millicent	2012-09-18 19:04:01
Worthington-Smyth	Henry	2012-09-17 12:27:15
Farrell	David	2012-09-15 08:22:05
Rumney	Henrietta	2012-09-05 08:42:35
Jones	Douglas	2012-09-02 18:43:05
Sarwin	Ramnaresh	2012-09-01 08:44:42
Coplin	Joan	2012-08-29 08:32:41
Mackenzie	Anna	2012-08-26 09:32:05
Genting	Matthew	2012-08-19 14:55:55
Pinker	David	2012-08-16 11:32:47
Baker	Timothy	2012-08-15 10:34:25
Bader	Florence	2012-08-10 17:52:03
Smith	Jack	2012-08-10 16:22:05
Farrell	Jemima	2012-08-10 14:28:01
Baker	Anne	2012-08-10 14:23:22
Jones	David	2012-08-06 16:32:55
Owen	Charles	2012-08-03 19:42:37
Stibbons	Ponder	2012-07-25 17:09:05
Boothe	Tim	2012-07-25 16:02:35
Dare	Nancy	2012-07-25 08:59:12
Tracy	Burton	2012-07-15 08:52:55
Butters	Gerald	2012-07-09 10:44:09
Joplette	Janice	2012-07-03 10:25:05
Rownam	Tim	2012-07-03 09:32:15
Smith	Tracy	2012-07-02 12:08:23
Smith	Darren	2012-07-02 12:02:05

/\* 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 name of the member  
formatted as a single column. Ensure no duplicate data, and order by  
the member name. \*/

```
SELECT DISTINCT Facilities.name as court_name,
      CONCAT(Members.surname, ' ', Members.firstname) AS member_name
FROM Bookings
LEFT JOIN Members
ON Bookings.memid = Members.memid
LEFT JOIN Facilities
ON Bookings.facid = Facilities.facid
WHERE Facilities.name LIKE 'Tennis Court%' AND Members.memid != 0
ORDER BY member_name
```

court_name	member_name
Tennis Court 2	Bader Florence
Tennis Court 1	Bader Florence
Tennis Court 1	Baker Anne
Tennis Court 2	Baker Anne
Tennis Court 2	Baker Timothy
Tennis Court 1	Baker Timothy
Tennis Court 1	Boothe Tim
Tennis Court 2	Boothe Tim
Tennis Court 1	Butters Gerald
Tennis Court 2	Butters Gerald
Tennis Court 1	Coplin Joan
Tennis Court 1	Crumpet Erica
Tennis Court 1	Dare Nancy
Tennis Court 2	Dare Nancy
Tennis Court 1	Farrell David
Tennis Court 2	Farrell David
Tennis Court 1	Farrell Jemima
Tennis Court 2	Farrell Jemima
Tennis Court 1	Genting Matthew
Tennis Court 1	Hunt John
Tennis Court 2	Hunt John

/\* 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 Facilities.name,
       CONCAT(Members.surname, ' ', Members.firstname) AS member_name, starttime,
CASE
WHEN Members.memid !=0 AND Facilities.membercost != 0 THEN Facilities.membercost *
Bookings.slots
WHEN Members.memid =0 AND Facilities.guestcost != 0 THEN Facilities.guestcost *
Bookings.slots
END AS cost

FROM Bookings
JOIN Members
ON Members.memid = Bookings.memid

```

```

JOIN Facilities
ON Bookings.facid = Facilities.facid
WHERE Bookings.starttime Between '2012-09-14 00:00:00' AND '2012-09-15 00:00:00'
HAVING cost > 30
ORDER BY cost DESC

```

name	member_name	starttime	cost
Massage Room 2	GUEST GUEST	2012-09-14 11:00:00	320.0
Massage Room 1	GUEST GUEST	2012-09-14 13:00:00	160.0
Massage Room 1	GUEST GUEST	2012-09-14 16:00:00	160.0
Massage Room 1	GUEST GUEST	2012-09-14 09:00:00	160.0
Tennis Court 2	GUEST GUEST	2012-09-14 17:00:00	150.0
Tennis Court 1	GUEST GUEST	2012-09-14 19:00:00	75.0
Tennis Court 2	GUEST GUEST	2012-09-14 14:00:00	75.0
Tennis Court 1	GUEST GUEST	2012-09-14 16:00:00	75.0
Squash Court	GUEST GUEST	2012-09-14 09:30:00	70.0
Massage Room 1	Farrell Jemima	2012-09-14 14:00:00	39.6
Squash Court	GUEST GUEST	2012-09-14 12:30:00	35.0
Squash Court	GUEST GUEST	2012-09-14 15:00:00	35.0

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

```

SELECT sub.name, sub.member_name, sub.cost
FROM (SELECT Facilities.name,
      CONCAT(Members.surname, ' ', Members.firstname) AS member_name, starttime,
CASE
WHEN Members.memid !=0 AND Facilities.membercost != 0 THEN Facilities.membercost *
Bookings.slots
WHEN Members.memid =0 AND Facilities.guestcost != 0 THEN Facilities.guestcost *
Bookings.slots
END AS cost

FROM Bookings
JOIN Members
ON Members.memid = Bookings.memid
JOIN Facilities
ON Bookings.facid = Facilities.facid
WHERE Bookings.starttime Between '2012-09-14 00:00:00' AND '2012-09-15 00:00:00') sub
HAVING sub.cost > 30
ORDER BY cost DESC

```

name	member_name	cost ▾
Massage Room 2	GUEST GUEST	320.0
Massage Room 1	GUEST GUEST	160.0
Massage Room 1	GUEST GUEST	160.0
Massage Room 1	GUEST GUEST	160.0
Tennis Court 2	GUEST GUEST	150.0
Tennis Court 1	GUEST GUEST	75.0
Tennis Court 2	GUEST GUEST	75.0
Tennis Court 1	GUEST GUEST	75.0
Squash Court	GUEST GUEST	70.0
Massage Room 1	Farrell Jemima	39.6
Squash Court	GUEST GUEST	35.0
Squash Court	GUEST GUEST	35.0

/\* 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 Facilities.name,
CASE
WHEN Members.memid !=0 AND Facilities.membercost != 0 THEN Facilities.membercost *
Bookings.slots
WHEN Members.memid =0 AND Facilities.guestcost != 0 THEN Facilities.guestcost *
Bookings.slots
END AS total_revenue

FROM Bookings
JOIN Members
ON Members.memid = Bookings.memid
JOIN Facilities
ON Bookings.facid = Facilities.facid

HAVING total_revenue < 1000
ORDER BY total_revenue DESC

```

name	total_revenue
Massage Room 1	640.0
Massage Room 1	640.0
Massage Room 1	640.0
Massage Room 1	480.0
Massage Room 1	480.0
Massage Room 1	480.0
Massage Room 1	480.0
Massage Room 1	480.0
Massage Room 1	480.0
Massage Room 1	320.0
Massage Room 1	320.0
Massage Room 1	320.0
Massage Room 1	320.0
Massage Room 1	320.0
Massage Room 1	320.0
Massage Room 1	320.0

<https://sql.springboard.com/>

Username: student

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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. \*/