**SQL MINI PROJECT**

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.

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

**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=dac4884538924bfb7b1ae7aee8a14859) \*  
**FROM** Facilities  
**WHERE** membercost [>](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_greater-than&token=dac4884538924bfb7b1ae7aee8a14859)0

|  |
| --- |
| **Answer:**  Tennis Court 1 |
| Tennis Court 2 |
| Massage Room 1 |
| Massage Room 2 |
| Squash Court |

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

**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=dac4884538924bfb7b1ae7aee8a14859) [COUNT](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fgroup-by-functions.html%23function_count&token=dac4884538924bfb7b1ae7aee8a14859)( membercost )  
**FROM** Facilities  
**WHERE** membercost [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=dac4884538924bfb7b1ae7aee8a14859)0

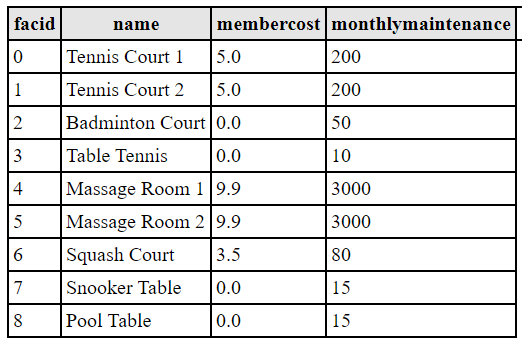
Ans : 4

/\* 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. \*/

**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=1583ba6db80e448ca7d33f1bf37dd222) facid, name, membercost, monthlymaintenance  
**FROM** Facilities  
**WHERE** membercost [<](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_less-than&token=1583ba6db80e448ca7d33f1bf37dd222) 0.2 \* monthlymaintenance

**Answer:**

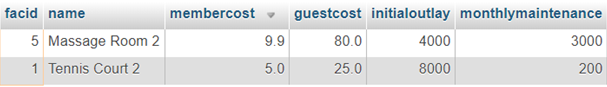


/\* Q4: How can you retrieve the details of facilities with ID 1 and 5? Write the query without using the OR operator. \*/

**SQL Command:**

**FROM** Facilities  
**WHERE** facid  
[**IN**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23function_in&token=bdad11c44b0b8ad83b14059a1dabc3ab) ( 1, 5 )

**Answer:**

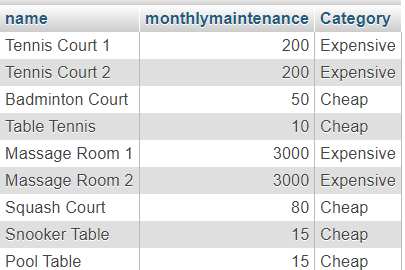


/\* Q5: How can you produce a list of facilities, with each labelled as 'cheap' or 'expensive', depending on if their monthly maintenance cost is more than $100? Return the name and monthly maintenance of the facilities in question. \*/

**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=1583ba6db80e448ca7d33f1bf37dd222) name, monthlymaintenance,  
[**CASE**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcontrol-flow-functions.html%23operator_case&token=1583ba6db80e448ca7d33f1bf37dd222) **WHEN** monthlymaintenance [>](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_greater-than&token=1583ba6db80e448ca7d33f1bf37dd222)100  
**THEN** 'Expensive'  
**ELSE** 'Cheap'  
**END** **AS** Category  
**FROM** Facilities

**Answer:**



/\* 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. \*/

**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=1583ba6db80e448ca7d33f1bf37dd222) firstname, surname, joindate  
**FROM** Members  
**ORDER** **BY** joindate **DESC**

**Answer:**



/\* 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. \*/

**SQL Command:**

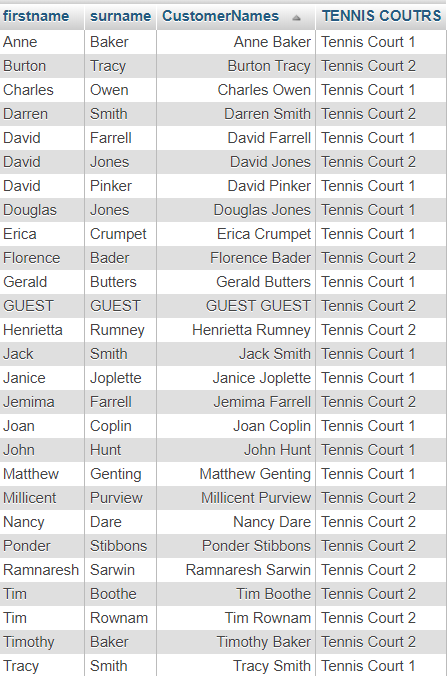
[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=bf913031a78ee652c46bc7c92917e969) Members.firstname, Members.surname,

[CONCAT](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fstring-functions.html%23function_concat&token=bf913031a78ee652c46bc7c92917e969)( Members.firstname, " ", Members.surname ) **AS** CustomerNames,  
[**CASE**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcontrol-flow-functions.html%23operator_case&token=bf913031a78ee652c46bc7c92917e969) **WHEN** Bookings.facid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=bf913031a78ee652c46bc7c92917e969)0  
**THEN** 'Tennis Court 1'  
**ELSE** 'Tennis Court 2'  
**END** **AS** 'TENNIS COUTRS'

**FROM** Members

**INNER** **JOIN** Bookings **ON** Members.memid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=bf913031a78ee652c46bc7c92917e969) Bookings.memid  
**WHERE** Bookings.facid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=bf913031a78ee652c46bc7c92917e969)0 [**OR**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Flogical-operators.html%23operator_or&token=bf913031a78ee652c46bc7c92917e969) Bookings.facid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=bf913031a78ee652c46bc7c92917e969)1  
**GROUP** **BY** CustomerNames  
**ORDER** **BY** CustomerNames

**Answer:**



/\* 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. \*/

**SQL Command:**

**SELECT** CONCAT( Members.firstname, " ", Members.surname ) **AS** CustomerNames,Facilities.name **AS** 'Name Of Facility',

**CASE WHEN** Members.memid = 0

**THEN** Bookings.slots \* Facilities.guestcost

**ELSE** Bookings.slots \* Facilities.membercost

**END AS** Cost

**FROM** Members

**INNER JOIN** Bookings **ON** Members.memid = Bookings.memid

**INNER JOIN** Facilities **ON** Bookings.facid = Facilities.facid

**WHERE** Bookings.starttime >= '2012-09-14'

**AND** Bookings.starttime < '2012-09-15'

**AND** ((Members.memid = 0

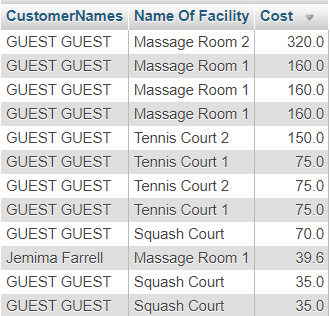
**AND** Bookings.slots \* Facilities.guestcost >30)

**OR** (Members.memid != 0

**AND** Bookings.slots \* Facilities.membercost >30))

**ORDER** **BY** Cost **DESC**

**Answer:**



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

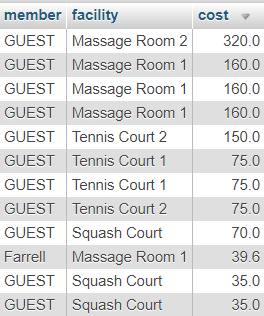
**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=0bea0671d46ef00368672b05500e083a) member, facility, cost  
**FROM** (

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=0bea0671d46ef00368672b05500e083a) Members.surname **AS** member, Facilities.name **AS** facility,  
[**CASE**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcontrol-flow-functions.html%23operator_case&token=0bea0671d46ef00368672b05500e083a)  
**WHEN** Members.memid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=0bea0671d46ef00368672b05500e083a)0  
**THEN** Bookings.slots \* Facilities.guestcost  
**ELSE** Bookings.slots \* Facilities.membercost  
**END** **AS** cost  
**FROM** Members  
**JOIN** Bookings **ON** Members.memid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=0bea0671d46ef00368672b05500e083a) Bookings.memid  
**INNER** **JOIN** Facilities **ON** Bookings.facid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=0bea0671d46ef00368672b05500e083a) Facilities.facid  
**WHERE** Bookings.starttime [>=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_greater-than-or-equal&token=0bea0671d46ef00368672b05500e083a) '2012-09-14'  
[**AND**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Flogical-operators.html%23operator_and&token=0bea0671d46ef00368672b05500e083a) Bookings.starttime [<](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_less-than&token=0bea0671d46ef00368672b05500e083a) '2012-09-15'

) **AS** Table1  
**WHERE** cost [>](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_greater-than&token=0bea0671d46ef00368672b05500e083a)30

**Answer:**



/\* 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! \*/

**SQL Command:**

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=0bea0671d46ef00368672b05500e083a) FacilityName, Totalrevenue  
**FROM** (

[**SELECT**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fselect.html&token=0bea0671d46ef00368672b05500e083a) Facilities.name **AS** FacilityName,

[SUM](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fgroup-by-functions.html%23function_sum&token=0bea0671d46ef00368672b05500e083a)(  
[**CASE**](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcontrol-flow-functions.html%23operator_case&token=0bea0671d46ef00368672b05500e083a) **WHEN** memid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=0bea0671d46ef00368672b05500e083a)0  
**THEN** slots \* Facilities.guestcost  
**ELSE** slots \* Facilities.membercost  
**END** ) **AS** Totalrevenue

**FROM** Bookings  
**INNER** **JOIN** Facilities **ON** Bookings.facid [=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_equal&token=0bea0671d46ef00368672b05500e083a) Facilities.facid  
**GROUP** **BY** Facilities.name

) **AS** Table1  
**WHERE** Totalrevenue [<=](https://sql.springboard.com/phpmyadmin/url.php?url=http%3A%2F%2Fdev.mysql.com%2Fdoc%2Frefman%2F5.5%2Fen%2Fcomparison-operators.html%23operator_less-than-or-equal&token=0bea0671d46ef00368672b05500e083a)1000  
**ORDER** **BY** Totalrevenue

**Answer:**

