**QUESTIONS:**

**Q1: Some of the facilities charge a fee to members, but some do not.**

**Write a SQL query to produce a list of the names of the facilities that do.**

**SQL CODE**

SELECT name AS facility\_name, membercost

FROM Facilities

WHERE membercost != 0;

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) name AS facility\_name, membercost FROM Facilities WHERE membercost != 0;

**OUTPUT**

| **[Full texts](http://10.0.0.204/phpmyadmin/index.php)** | | | | [**facility\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+name+AS+facility_name%2C+membercost%0D%0AFROM+Facilities+%0D%0AWHERE+membercost+%21%3D+0++%0AORDER+BY+%60facility_name%60+ASC&sql_signature=4998f2342a2c3e685335a6c078e806910dc8262fb0ccb054b5dabf6c3ba3c380&session_max_rows=25&is_browse_distinct=0) | [**membercost**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+name+AS+facility_name%2C+membercost%0D%0AFROM+Facilities+%0D%0AWHERE+membercost+%21%3D+0++%0AORDER+BY+%60Facilities%60.%60membercost%60+ASC&sql_signature=81323bf9b74e6f419f3b8bb57ce490827a4ee7f707837bf67980a791e22f1eab&session_max_rows=25&is_browse_distinct=0) |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | 5.0 |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | 5.0 |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Massage Room 1 | 9.9 |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Massage Room 2 | 9.9 |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Squash Court | 3.5 |  |  |  |  |

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

**SQL CODE**

SELECT COUNT(name) AS numb\_facility\_zerofeemembers

FROM Facilities

WHERE membercost = 0;

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [COUNT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_count)(name) AS numb\_facility\_zerofeemembers FROM Facilities WHERE membercost = 0;

**OUTPUT**

| **numb\_facility\_zerofeemembers** |  |
| --- | --- |
| 4 |  |

**Q3: Write an SQL query to show 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 CODE**

SELECT facid, name AS facility\_name, membercost, monthlymaintenance

FROM Facilities

WHERE membercost < monthlymaintenance \* 0.20;

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) facid, name AS facility\_name, membercost, monthlymaintenance FROM Facilities WHERE membercost < monthlymaintenance \* 0.20;

**OUTPUT**

| **[Full texts](http://10.0.0.204/phpmyadmin/index.php)** | | | | [**facid**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+facid%2C+name+AS+facility_name%2C+membercost%2C+monthlymaintenance%0D%0AFROM+Facilities+%0D%0AWHERE+membercost+%3C+monthlymaintenance+%2A+0.20++%0AORDER+BY+%60Facilities%60.%60facid%60+ASC&sql_signature=f5a7b2458e1fbb4fb9667e9594c19fe9767e7606b0dcf00c01d3a7573a08ba68&session_max_rows=25&is_browse_distinct=0) | [**facility\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+facid%2C+name+AS+facility_name%2C+membercost%2C+monthlymaintenance%0D%0AFROM+Facilities+%0D%0AWHERE+membercost+%3C+monthlymaintenance+%2A+0.20++%0AORDER+BY+%60facility_name%60+ASC&sql_signature=f3617152b711fd75516691e4700a0eb6727ce5434c4fbf8200e9b1ddbc89297f&session_max_rows=25&is_browse_distinct=0) | [**membercost**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+facid%2C+name+AS+facility_name%2C+membercost%2C+monthlymaintenance%0D%0AFROM+Facilities+%0D%0AWHERE+membercost+%3C+monthlymaintenance+%2A+0.20++%0AORDER+BY+%60Facilities%60.%60membercost%60+ASC&sql_signature=854d5356159c3484d1402caa7f3ff0d67b39bb52e3b8f6912d9fe5012e0e8b10&session_max_rows=25&is_browse_distinct=0) | [**monthlymaintenance**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+facid%2C+name+AS+facility_name%2C+membercost%2C+monthlymaintenance%0D%0AFROM+Facilities+%0D%0AWHERE+membercost+%3C+monthlymaintenance+%2A+0.20++%0AORDER+BY+%60Facilities%60.%60monthlymaintenance%60+ASC&sql_signature=2c7d228f87af53c2d85868ab956c005c920074292e2f99b9ac2485932a7f0674&session_max_rows=25&is_browse_distinct=0) |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 0 | Tennis Court 1 | 5.0 | 200 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 1 | Tennis Court 2 | 5.0 | 200 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 2 | Badminton Court | 0.0 | 50 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 3 | Table Tennis | 0.0 | 10 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 4 | Massage Room 1 | 9.9 | 3000 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 5 | Massage Room 2 | 9.9 | 3000 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 6 | Squash Court | 3.5 | 80 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 7 | Snooker Table | 0.0 | 15 |  |  |  |  | |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 8 | Pool Table | 0.0 | 15 |  |  |  |  | |

**Q4: Write an SQL query to retrieve the details of facilities with ID 1 and 5. Try writing the query without using the OR operator.**

**SQL CODE**

SELECT \*

FROM Facilities

WHERE NOT(facid != 1 and facid != 5);

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM Facilities WHERE [NOT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not)(facid != 1 [and](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) facid != 5);

**OUTPUT**

| **[Full texts](http://10.0.0.204/phpmyadmin/index.php)** | | | | [**facid**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+%2A%0D%0AFROM+Facilities+%0D%0AWHERE+NOT%28facid+%21%3D+1+and+facid+%21%3D+5%29++%0AORDER+BY+%60Facilities%60.%60facid%60+ASC&sql_signature=a1d663fe0a1f256464abed4339cc188f0d7cd5565c9f77ffe72c9b52bdfc1d0c&session_max_rows=25&is_browse_distinct=0) | [**name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+%2A%0D%0AFROM+Facilities+%0D%0AWHERE+NOT%28facid+%21%3D+1+and+facid+%21%3D+5%29++%0AORDER+BY+%60Facilities%60.%60name%60+ASC&sql_signature=afcde7308dec18ea60b036696e021abbacea42a71e827ad775819b473a1537f2&session_max_rows=25&is_browse_distinct=0) | [**membercost**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+%2A%0D%0AFROM+Facilities+%0D%0AWHERE+NOT%28facid+%21%3D+1+and+facid+%21%3D+5%29++%0AORDER+BY+%60Facilities%60.%60membercost%60+ASC&sql_signature=33b38386a018ad20fc26d64518c90ad8765e3cc4e5d9c132358bb6eb44df48f9&session_max_rows=25&is_browse_distinct=0) | [**guestcost**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+%2A%0D%0AFROM+Facilities+%0D%0AWHERE+NOT%28facid+%21%3D+1+and+facid+%21%3D+5%29++%0AORDER+BY+%60Facilities%60.%60guestcost%60+ASC&sql_signature=f21fb969a5ea1e0706353e0dcc9be3b8e1be55286c011414ec66d15c2f68826f&session_max_rows=25&is_browse_distinct=0) | [**initialoutlay**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+%2A%0D%0AFROM+Facilities+%0D%0AWHERE+NOT%28facid+%21%3D+1+and+facid+%21%3D+5%29++%0AORDER+BY+%60Facilities%60.%60initialoutlay%60+ASC&sql_signature=1d614d2ecaa6e3e6301e26a12264a4d3442496ac4fb4adb3a74f9c695aaaceb8&session_max_rows=25&is_browse_distinct=0) | [**monthlymaintenance**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+%2A%0D%0AFROM+Facilities+%0D%0AWHERE+NOT%28facid+%21%3D+1+and+facid+%21%3D+5%29++%0AORDER+BY+%60Facilities%60.%60monthlymaintenance%60+ASC&sql_signature=6b47400438b13e8cdb34ae10373a812ffb9f564a21c8193804c04e1b5e76d61c&session_max_rows=25&is_browse_distinct=0) |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 1 | Tennis Court 2 | 5.0 | 25.0 | 8000 | 200 |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | 5 | Massage Room 2 | 9.9 | 80.0 | 4000 | 3000 |  |  |  |  |

**Q5: 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 CODE**

SELECT f.name AS facility\_name,

CASE WHEN monthlymaintenance > 100 THEN 'expensive'

ELSE 'cheap' END AS monthly\_maintenance

FROM Facilities AS f;

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) f.name AS facility\_name, [CASE](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/control-flow-functions.html%23operator_case) WHEN monthlymaintenance > 100 THEN 'expensive' ELSE 'cheap' END AS monthly\_maintenance FROM Facilities AS f;

**OUTPUT**

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Bottom of Form

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| **[Full texts](http://10.0.0.204/phpmyadmin/index.php)** | | | | [**facility\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+f.name+AS+facility_name%2C+%0D%0A%09CASE+WHEN+monthlymaintenance+%3E+100+THEN+%27expensive%27%0D%0A%09ELSE+%27cheap%27+END+AS+monthly_maintenance%0D%0AFROM+Facilities+AS+f++%0AORDER+BY+%60facility_name%60+ASC&sql_signature=f5309ac601f6f3ba2d40eccc2a8d5f03f4895a1cfc6fb6847040b1a3ba3eca5d&session_max_rows=25&is_browse_distinct=0) | [**monthly\_maintenance**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+f.name+AS+facility_name%2C+%0D%0A%09CASE+WHEN+monthlymaintenance+%3E+100+THEN+%27expensive%27%0D%0A%09ELSE+%27cheap%27+END+AS+monthly_maintenance%0D%0AFROM+Facilities+AS+f++%0AORDER+BY+%60monthly_maintenance%60+ASC&sql_signature=401d26c4caa44fb260a4ffbbef3b46522c7f2ce4ba56e4b73233d4734d48c6a2&session_max_rows=25&is_browse_distinct=0) |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | expensive |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | expensive |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Badminton Court | cheap |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Table Tennis | cheap |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Massage Room 1 | expensive |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Massage Room 2 | expensive |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Squash Court | cheap |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Snooker Table | cheap |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Pool Table | cheap |  |  |  |  |

Bottom of Form

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

**SQL CODE**

SELECT firstname, surname, joindate AS recent\_joined

FROM Members

WHERE joindate = (

SELECT MAX(joindate) AS recent\_joined

FROM Members)

GROUP BY firstname, surname, joindate;

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) firstname, surname, joindate AS recent\_joined FROM Members WHERE joindate = ( [SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [MAX](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_max)(joindate) AS recent\_joined FROM Members) GROUP BY firstname, surname, joindate;

**OUTPUT**

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Bottom of Form

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| **[Full texts](http://10.0.0.204/phpmyadmin/index.php)** | | | | **firstname** | **surname** | **recent\_joined** |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Darren | Smith | 2012-09-26 18:08:45 |  |  |  |  |

**Bottom of Form**

**Q7: 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 CODE**

SELECT f.name AS court\_name, CONCAT(firstname, ' ' , surname) AS member\_name

FROM Facilities AS f, Members AS m, Bookings AS b

WHERE f.facid = b.facid and m.memid = b.memid

AND f.name LIKE 'Ten%' AND firstname NOT LIKE 'GUE%'

GROUP BY m.memid

ORDER BY member\_name;

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) f.name AS court\_name, CONCAT(firstname, ' ' , surname) AS member\_name FROM Facilities AS f, Members AS m, Bookings AS b WHERE f.facid = b.facid [and](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) m.memid = b.memid [AND](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) f.name [LIKE](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'Ten%' [AND](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) firstname [NOT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) [LIKE](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'GUE%' GROUP BY m.memid ORDER BY member\_name;

**OUTPUT**

| **[Full texts](http://10.0.0.204/phpmyadmin/index.php)** | | | | [**court\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+f.name+AS+court_name%2C++CONCAT%28firstname%2C+%27+%27+%2C+surname%29+AS+member_name%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+AS+b%0D%0AWHERE+f.facid+%3D+b.facid+and+m.memid+%3D+b.memid%0D%0AAND+f.name+LIKE+%27Ten%25%27+AND+firstname+NOT+LIKE+%27GUE%25%27%0D%0AGROUP+BY+m.memid++%0AORDER+BY+%60court_name%60+ASC&sql_signature=19bc740ba89d150a57c18b0537a8bb7e5ef01ec82a2082ce3dfd7d7958c3a64f&session_max_rows=25&is_browse_distinct=0) | [**member\_name [Ascending](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+f.name+AS+court_name%2C++CONCAT%28firstname%2C+%27+%27+%2C+surname%29+AS+member_name%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+AS+b%0D%0AWHERE+f.facid+%3D+b.facid+and+m.memid+%3D+b.memid%0D%0AAND+f.name+LIKE+%27Ten%25%27+AND+firstname+NOT+LIKE+%27GUE%25%27%0D%0AGROUP+BY+m.memid++%0AORDER+BY+%60member_name%60+DESC&sql_signature=1202b882a69f7eb4bb3296c5111ed514022d8909551facedfd588a28db46a3da&session_max_rows=25&is_browse_distinct=0)1**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=Facilities&sql_query=SELECT+f.name+AS+court_name%2C++CONCAT%28firstname%2C+%27+%27+%2C+surname%29+AS+member_name%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+AS+b%0D%0AWHERE+f.facid+%3D+b.facid+and+m.memid+%3D+b.memid%0D%0AAND+f.name+LIKE+%27Ten%25%27+AND+firstname+NOT+LIKE+%27GUE%25%27%0D%0AGROUP+BY+m.memid++%0AORDER+BY+%60member_name%60+DESC&sql_signature=1202b882a69f7eb4bb3296c5111ed514022d8909551facedfd588a28db46a3da&session_max_rows=25&is_browse_distinct=0) |  | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Anne Baker |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Burton Tracy |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Charles Owen |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Darren Smith |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | David Farrell |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | David Jones |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | David Pinker |  |  |  |  |
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|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Erica Crumpet |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Florence Bader |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Gerald Butters |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Henrietta Rumney |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Jack Smith |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Janice Joplette |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Jemima Farrell |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Joan Coplin |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | John Hunt |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 1 | Matthew Genting |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Millicent Purview |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Nancy Dare |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Ponder Stibbons |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Ramnaresh Sarwin |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Tim Boothe |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Tim Rownam |  |  |  |  |
|  | [Edit Edit](http://10.0.0.204/phpmyadmin/index.php) | [Copy Copy](http://10.0.0.204/phpmyadmin/index.php) | [Delete Delete](http://10.0.0.204/phpmyadmin/index.php) | Tennis Court 2 | Timothy Baker |  |  |  |  |

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**Q8: 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 cost 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 CODE**

SELECT name AS facility\_name, CONCAT(firstname, ' ', surname) AS member\_name, CASE WHEN (m.memid != 0) THEN (slots \* membercost) ELSE (slots \* guestcost) END AS cost FROM Facilities AS f, Members AS m, Bookings as b WHERE b.memid = m.memid AND f.facid = b.facid AND DATE(starttime) = '2012-09-14' AND ((m.memid !=0 AND slots \* membercost > 30) OR (m.memid = 0 AND slots \* guestcost > 30)) ORDER BY cost DESC;

**OR**

SELECT name AS facility\_name, CONCAT(firstname, ' ', surname) AS member\_name,

CASE WHEN (m.memid != 0) THEN (slots \* membercost) ELSE (slots \* guestcost) END AS cost

FROM Facilities AS f, Members AS m, Bookings as b

WHERE b.memid = m.memid AND f.facid = b.facid AND DATE(starttime) = '2012-09-14' AND ((m.memid !=0 AND slots \* membercost > 30) OR (m.memid = 0 AND slots \* guestcost > 30))

ORDER BY cost DESC;

**OUTPUT**

Top of Form

Bottom of Form

| [**facility\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=f&sql_query=SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+FROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+WHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27+AND+%28%28m.memid+%21%3D0+AND+slots+%2A+membercost+%3E+30%29+OR+%28m.memid+%3D+0+AND+slots+%2A+guestcost+%3E+30%29%29++%0AORDER+BY+%60facility_name%60+ASC&sql_signature=cc92105fe89efb155fae5b5c2d3cf41a93a089b089121bc9cd2d1c3249cd43c5&session_max_rows=25&is_browse_distinct=0) | [**member\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=f&sql_query=SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+FROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+WHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27+AND+%28%28m.memid+%21%3D0+AND+slots+%2A+membercost+%3E+30%29+OR+%28m.memid+%3D+0+AND+slots+%2A+guestcost+%3E+30%29%29++%0AORDER+BY+%60member_name%60+ASC&sql_signature=57be201bb3ea97172725226506d3890767c3a25482133eafab4fc635061d017b&session_max_rows=25&is_browse_distinct=0) | [**cost [Descending](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=f&sql_query=SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+FROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+WHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27+AND+%28%28m.memid+%21%3D0+AND+slots+%2A+membercost+%3E+30%29+OR+%28m.memid+%3D+0+AND+slots+%2A+guestcost+%3E+30%29%29++%0AORDER+BY+%60cost%60+ASC&sql_signature=20b3253f6bebd7decf19eaed73ac44f67e2f4b1c0be162cefd08eb37c9117983&session_max_rows=25&is_browse_distinct=0)1**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=f&sql_query=SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+FROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+WHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27+AND+%28%28m.memid+%21%3D0+AND+slots+%2A+membercost+%3E+30%29+OR+%28m.memid+%3D+0+AND+slots+%2A+guestcost+%3E+30%29%29++%0AORDER+BY+%60cost%60+ASC&sql_signature=20b3253f6bebd7decf19eaed73ac44f67e2f4b1c0be162cefd08eb37c9117983&session_max_rows=25&is_browse_distinct=0) |  |
| --- | --- | --- | --- |
| 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 1 | GUEST GUEST | 75.0 |  |
| Tennis Court 2 | GUEST GUEST | 75.0 |  |
| Squash Court | GUEST GUEST | 70.0 |  |
| Massage Room 1 | Jemima Farrell | 39.6 |  |
| Squash Court | GUEST GUEST | 35.0 |  |
| Squash Court | GUEST GUEST | 35.0 |  |

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

**SQL CODE**

SELECT \*

FROM

(SELECT name AS facility\_name, CONCAT(firstname, ' ', surname) AS member\_name,

CASE WHEN (m.memid != 0) THEN (slots \* membercost) ELSE (slots \* guestcost) END AS cost

FROM Facilities AS f, Members AS m, Bookings as b

WHERE b.memid = m.memid AND f.facid = b.facid AND DATE(starttime) = '2012-09-14') AS subquery

WHERE cost >30

ORDER BY cost DESC;

**OR**

[SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM ([SELECT](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) name AS facility\_name, CONCAT(firstname, ' ', surname) AS member\_name, [CASE](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/control-flow-functions.html%23operator_case) WHEN (m.memid != 0) THEN (slots \* membercost) ELSE (slots \* guestcost) END AS cost FROM Facilities AS f, Members AS m, Bookings as b WHERE b.memid = m.memid [AND](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) f.facid = b.facid [AND](http://10.0.0.204/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) DATE(starttime) = '2012-09-14') AS subquery WHERE cost >30 ORDER BY cost DESC;

**OUTPUT**

| [**facility\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=subquery&sql_query=SELECT+%2A+%0D%0AFROM+%0D%0A%09%28SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+%0D%0A%09CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+%0D%0AWHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27%29+AS+subquery%0D%0AWHERE+cost+%3E30++%0AORDER+BY+%60subquery%60.%60facility_name%60+ASC&sql_signature=0ac6834fda87d199790b8547611512ccc77dc40f43a275d7a0b3d9dec4f83ca1&session_max_rows=25&is_browse_distinct=0) | [**member\_name**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=subquery&sql_query=SELECT+%2A+%0D%0AFROM+%0D%0A%09%28SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+%0D%0A%09CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+%0D%0AWHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27%29+AS+subquery%0D%0AWHERE+cost+%3E30++%0AORDER+BY+%60subquery%60.%60member_name%60+ASC&sql_signature=09e8e9915c5dd45d41f577133e3d25fac3c348c3630c6e14a43cf3938b0bf34e&session_max_rows=25&is_browse_distinct=0) | [**cost [Descending](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=subquery&sql_query=SELECT+%2A+%0D%0AFROM+%0D%0A%09%28SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+%0D%0A%09CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+%0D%0AWHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27%29+AS+subquery%0D%0AWHERE+cost+%3E30++%0AORDER+BY+%60subquery%60.%60cost%60+ASC&sql_signature=ed389f1406e3addc7bec8de1b76282fda8539374e59e578a0ccc42263b1a010d&session_max_rows=25&is_browse_distinct=0)1**](http://10.0.0.204/phpmyadmin/index.php?route=/sql&db=charrie&table=subquery&sql_query=SELECT+%2A+%0D%0AFROM+%0D%0A%09%28SELECT+name+AS+facility_name%2C+CONCAT%28firstname%2C+%27+%27%2C+surname%29+AS+member_name%2C+%0D%0A%09CASE+WHEN+%28m.memid+%21%3D+0%29+THEN+%28slots+%2A+membercost%29+ELSE+%28slots+%2A+guestcost%29+END+AS+cost+%0D%0AFROM+Facilities+AS+f%2C+Members+AS+m%2C+Bookings+as+b+%0D%0AWHERE+b.memid+%3D+m.memid+AND+f.facid+%3D+b.facid+AND+DATE%28starttime%29+%3D+%272012-09-14%27%29+AS+subquery%0D%0AWHERE+cost+%3E30++%0AORDER+BY+%60subquery%60.%60cost%60+ASC&sql_signature=ed389f1406e3addc7bec8de1b76282fda8539374e59e578a0ccc42263b1a010d&session_max_rows=25&is_browse_distinct=0) |  |
| --- | --- | --- | --- |
| 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 1 | GUEST GUEST | 75.0 |  |
| Tennis Court 2 | GUEST GUEST | 75.0 |  |
| Squash Court | GUEST GUEST | 70.0 |  |
| Massage Room 1 | Jemima Farrell | 39.6 |  |
| Squash Court | GUEST GUEST | 35.0 |  |
| Squash Court | GUEST GUEST | 35.0 |  |