/* 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 facid
FROM Facilities
WHERE membercost >0
LIMIT 0 , 30

/* Q2: How many facilities do not charge a fee to members? */
SELECT facid
FROM Facilities
WHERE membercost =0
LIMIT 0 , 30

/* 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

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facilities in question. */
SELECT facid, name, membercost, monthlymaintenance
FROM Facilities
WHERE membercost <20 % monthlymaintenance
LIMIT 0 , 30


/* 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 )
LIMIT 0 , 30


/* 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 cost
FROM Facilities
LIMIT 0 , 30



/* 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
FROM Members
GROUP BY joindate
ORDER BY joindate


/* 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. */
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SELECT name AS Name,
        CONCAT(firstname,'', surname) As Customername
FROM Facilities
Join Members
ON facid = memid
WHERE name LIKE '%Tennis Court%'
ORDER BY firstname


/* 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.firstname, ' ', Members.surname) as Name,
  CASE WHEN Members.firstname LIKE '%guest' THEN Facilities.guestcost * Bookings.slots
  WHEN Members.firstname NOT LIKE '%guest%'  THEN Facilities.membercost  *
Bookings.slots
  END AS Total_cost
FROM
  Bookings
  JOIN Members ON Bookings.memid = Members.memid
  JOIN Facilities ON Bookings.facid = Facilities.facid
WHERE
  Bookings.starttime LIKE '%2012-09-14%'
AND
((Members.memid = 0 and (Facilities.guestcost * Bookings.slots) > 30) or(Members.memid > 0
AND (Facilities.membercost * Bookings.slots) >30))
Order by Total_cost DESC


/* Q9: This time, produce the same result as in Q8, but using a subquery. */
SELECT fname , mname , cost FROM (
        SELECT CONCAT(Members.firstname, ' ', Members.surname) as mname,
        CASE WHEN Members.firstname LIKE '%guest' THEN Facilities.guestcost *
Bookings.slots
        WHEN Members.firstname NOT LIKE '%guest%'  THEN Facilities.membercost  *
Bookings.slots
        END AS cost,
        Facilities.name as fname
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FROM
	Bookings JOIN Members ON Bookings.memid = Members.memid JOIN Facilities ON
Bookings.facid = Facilities.facid
WHERE
	Bookings.starttime LIKE '%2012-09-14%'
	)
	AS Booking
WHERE
	cost > 30
ORDER BY COST DESC


/* 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 guestcost, membercost, initialoutlay, initialoutlay - ( membercost + guestcost ) AS
revenue
FROM Facilities
WHERE initialoutlay - ( membercost + guestcost ) <1000
ORDER BY initialoutlay - ( membercost + guestcost )
LIMIT 0 , 30
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