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

SELECT * FROM `Facilities` WHERE membercost != 0

/* Q2: How many facilities do not charge a fee to members? */
SELECT COUNT( * )
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. */

SELECT name, monthlymaintenance,
                CASE WHEN monthlymaintenance <= 100 THEN 'Cheap'
                ELSE 'Expensive' END AS COST_Group
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, joindate FROM `Members` WHERE joindate = (SELECT
MAX(joindate) from `Members`)


/* 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 CONCAT(firstname, ' ',surname) as mname, f.name, bookid FROM
`Bookings` as b, `Facilities` as f, `Members` as m WHERE m.memid = b.memid
and b.facid= f.facid and b.facid in (0,1) ORDER BY mname
```

```
/* 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 CONCAT(m.firstname, ' ', m.surname) as mname, f.name,
CASE WHEN b.memid In (0) THEN (b.slots * f.guestcost)
ELSE (b.slots * f.membercost) END AS cost
FROM `Bookings` as b, `Facilities` as f, `Members` as m WHERE b.memid =
m.memid and b.facid= f.facid AND CAST(b.starttime AS DATE) = '2012-09-14'
having cost > 30 ORDER BY cost DESC

/* Q9: This time, produce the same result as in Q8, but using a subquery.
*/
SELECT CONCAT(m.firstname, ' ', m.surname) as mname, f.name,
CASE WHEN b.memid In (0) THEN (b.slots * f.guestcost)
ELSE (b.slots * f.membercost) END AS cost
FROM `Bookings` as b, `Facilities` as f, `Members` as m WHERE b.memid =
m.memid and b.facid= f.facid AND CAST(b.starttime AS DATE)= '2012-09-14'
having 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 f.name, sum(
     CASE WHEN b.memid In (0) THEN (b.slots * f.guestcost)
     ELSE (b.slots * f.membercost) END) AS total_revenue from `Facilities`
as f JOIN `Bookings` as b ON b.facid = f.facid group by b.facid having
total_revenue < 1000 Order by total_revenue DESC
```