Lab 3 Solutions

For the classSchedule database, write SQL statements to answer the following questions:

1. Which students have an ID number that is less than 50000?

   Soln: SELECT student_id, student_name FROM student WHERE student_id <50000;

2. What is the name of the faculty member whose ID is 4756?

   Soln: SELECT faculty_name FROM faculty WHERE faculty_id = 4756;

3. Which faculty members have qualified to teach a course since 1993? List the faculty ID, course and date of qualification.

   Soln: SELECT faculty_id, course_id, date_qualified FROM qualified WHERE date_qualified >= '1993-01-01';

4. What are the courses included in the section table? List each course only once.

   Soln: SELECT DISTINCT course_id FROM section;

For the hotelBooking database, write SQL statements to answer the following question:

1. List full details of all hotels.

   Soln: SELECT * FROM Hotel;

2. List full details of all in London.

   Soln: SELECT * FROM Hotel WHERE city = 'London';

3. List the bookings for which no dateTo has been specified.

   Soln: SELECT hotelNo, guestNo, dateFrom, roomNo FROM Booking WHERE dateTo IS NULL;

For the stayHome database, write SQL statements to answer the following queries:

1. List the rate for renting videos for 3 days.

   Soln: SELECT catalogNo, title, dailyRental *3 AS threeDayRate FROM video;

2. List all staff with a salary between $45000 and $50000.

   Soln: SELECT staffNo, name, position, salary FROM staff WHERE salary BETWEEN 45000 AND 50000;

3. List all videos in the Action or children categories.

   Soln: SELECT catalogNo, title, category FROM video WHERE category IN ('Action', 'Children');

4. List all staff whose first name is 'Sally'.

   Soln: SELECT staffNo, name, position, salary FROM staff WHERE name LIKE 'Sally %';

5. List the video rentals that have not yet been returned.

   SELECT dateOut, memberNo, videoNo FROM rental Agreement WHERE dataReturn IS NULL;

For the BankAccount database, write SQL statements to answer the following queries:

1. Find all customers with the last name "Smith"

   Soln: select * from customer where lname = ‘smith’;

2. List all products and customers who have balance between $200 and $500

   Soln: select product_cd, cust_id from account where balance between 200 and 500;

3. List all transaction details on the March 2004.

   Soln: select * from transaction where txn_date between ‘2004-03-01’ and ‘2004-03-31’;

4. List all the mail records (when it is sent, from who and who is the host) so that the host begins with the letter s.

   Soln: SELECT sentDateTime, srcuser, srchost FROM mail WHERE srchost LIKE 's%';

5. Find messages sent by barb to tricia

   Soln: select * FROM mail WHERE srcuser = 'barb' AND dstuser = 'tricia';

6. List all the messages with minimum 500 kilobytes size (hint the size in your table is in bytes)

   Soln: SELECT sentDateTime, srcuser, dstuser, size/1024 AS kilobytes FROM mail WHERE size/1024 >= 500;

7. Find messages whose sender is alphabetically starting before letter c and the size of the message is more than 5000 bytes

   Soln: SELECT srcuser, size FROM mail where srcuser < 'c' and size > 5000;

8. List different senders and receivers in the mail record

   Soln: SELECT distinct srcuser, dstuser FROM mail;