Lab 4

[Include your MySQL query and its output in your text file]

Write SQL queries to answer the following questions based on the classSchedule database.

1. What is the smallest section number used in the first semester of 2008?

Soln: select min(section_no) as min_section_no
from section
where semester = 'I-2008';

2. How many students are enrolled in section 2714 in the first semester of 2008?

Soln: select count(student_id) as numStudents
from registration
where section_no =2714 and semester = 'I-2008';

3. List all students in alphabetical order by student_name.

Soln: select * from student order by student_name;

4. List the students who are enrolled in each course in semester I,2008. Group the students by the sections in which they are enrolled.

Soln: select student_id, section_no, semester
from registration
group by section_no, student_id
having semester = 'I-2008'
order by section_no;

Write SQL queries to answer the following questions based on the adultliteracy database.

1. How many tutors have a status of Temp Stop?

Soln: select cout(tutor_id) as numTempStops
from tutor
where status = 'Temp Stop' ;

2. How many students were matched with someone in the first 5 months of the year?

Soln: select count(match_id) as numMatches rom match_history where start_date is not null and start_date >= '2008-01-01' and end_date <= '2008-05-31';

3. Which student has the highest read score?

Soln: select max(read) as highest_score from student;

Write SQL questions to answer the following questions based on the stayHome database.

1. List all videos sorted in descending order of price.

Soln: select * from Video order by price desc;

2. List the total number of staff with a salary greater than $4000 and the sum of their salaries.

Soln: select count(staffno) as totalStaff, sum(salary) as totalSalary
from staff
where salary > 40000;

3. For each branch office with more than one member of staff, find the number of staff working in each branch and the sum of their salaries.

Soln: select branchno, count(staffno) as totalStaff, sum(salary) as totalSalary
from staff
group by branchno
having totalStaff > 1
order by branchno;

Write SQL questions to answer the following questions based on the hotelBooking database.

1. List the names and addresses of all guests living in London, alphabetically ordered by name.

Soln: select guestName, guestAddress
from Guest
where guestAddress LIKE '%London%'
ORDER BY guestName;

2. List all double or family rooms with a price below £40.00 per night, in ascending order of price.

Soln: select * from Room where price < 40 and type in('double', 'family')
order by price;

3. How many hotels are there?

Soln: select count(*) as numHotels from Hotel;

4. What is the average price of a room?

Soln: select avg(price) as avgPrice from Room;

5. What is the total revenue per night from all double rooms?

Soln: select sum(price) as totalRevenue from Room where type = ‘double’;

6. How many different guests have made booking for August?

Soln: select count(distinct guestNo) as numGuest
from Booking
where (dateFrom <= ’2004-08-01’ and dateTo >= ’2004-08-01’) or (dateFrom >= ’2004-08-01’ and dateFrom <= ’2004-08-31’);

Write SQL questions to answer the following questions based on the BankAccount database.

1. What is the average balance for each type of account in the bank?

Soln: select product_cd, avg(balance) as avgbalance
from account
group by product_cd;

2. How many debit transactions have been made between Jan 2004 and March 2004?

Soln: select count(txn_type_cd) as numDebits
from transaction
where txn_date >= '2004-01-01' and txn_date <= '2004-03-31'
group by txn_type_cd
having txn_type_cd = 'DBT';

3. List all the mails whose size is more than 100000 bytes, the results are sorted by the size of the mails.

Soln: select *
from mail
where size > 100000
order by size;

4. List all tricia's mail records and sort her mails by host, and then by user within each host.

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Soln : select *
       from mail
       where dstuser = 'tricia'
       order by srchost, srcuser;
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