Data Science 5th Module End Exam - SQL

Q1. Consider the following table :

EmpID	EmpName	EmpAddress	Blood Group
1	Abhishek	Mumbai	O+
2	Anjali	Mumbai	B+
3	Jay	Kolkata	B+

Write PL/SQL queries for the following:

i. Alter the table to change datatype of empID from int to varchar2(10)

ii. Select the data from the table grouped by address and blood group .

iii. Display the data of employee no 2 and 3 .

iv. Delete the record of employee no 1 .

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Q2. Consider the following schema for a hospital. Services could be things like “blood test” or “consultation”.

A. Patient(PID, name, phone)

B. Doctor(SID, name)

C. Appointments(PID, date, time, service, SID)

Answer the following :

i.Select the appointments with the patient dated 20/2/2022

ii.Find the appointment time and patient name of all appointments for doctor Akash on April-14-2021.

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Q3. From the following tables write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord_no, purch_amt, cust_name, city

***Sample table*: orders**

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002

***Sample table*: customer**

customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3007	Brad Davis	New York	200	5001
3005	Graham Zusi	California	200	5002
3008	Julian Green	London	300	5002

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Q4. Consider the following table :

Sample table: salesman

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14

Perform the following:

i. Create a view for those salespeople who belong to the city of New York. :

ii. Return salesperson ID, name, and city.

iii. Create a view to find all the salesman who have the commission = 0.15. Return all the fields of the salesman

iv. Create a view to count the number of salespeople in each city. Return city, number of salespersons.

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Q5. Consider the following schema for a beauty parlour. Services could be things like “makeup” or “pedicure”.

A. Customer(CID, name, phone)

B. Employee(SID, name)

C. Appointments(CID, date, time, service, SID)

Answer the following :

i. Select the appointments with the customer dated 20/2/2022

ii. Find the appointment time and client name of all appointments for employee member Joy on Dec-14-2021.

Q6. Consider the following tables :

a. Employee(empid , empname , empaddress,emp_designation,deptid)

b. Department(deptid , deptname , deptmanager)

c. Income(empid, salary)

Answer the following

i. Write a plsql query to display empid , empname , deptmanager

ii. Write a plsql query to display empid , salary

iii. Write a plsql query to run left join on employee and department

iv. Wirte a plsql query to run right join on employee and salary

v. Write a plsql query to run cross join on all the three tables

Next question on the next page.

Q7. Write plsql queries for the following :

a. create a table customer (columns: customerid , customer_name , customer_address)

b. alter the above table to add another column customer_contactnumber

c. insert a record in the table

d. delete a record from the above table where customerid = 1

e. update the above table to change customer_name as ‘Rajesh’ where customerid=1

Q8. Consider the following tables :

a. Student(sid , sname , saddr)

b. Library(sid, books_issued, books_returned)

c. Marks(sid, grade)

Answer the following

i. Write a plsql query to display sid , sname , books_issued, books_returned

ii. Write a plsql query to display sname , grade

iii. Write a plsql query to run left join on student and library

iv. Wirte a plsql query to run right join on library and marks

v. .Write a plsql query to run full join on all the three tables

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Q9. Explain group by clauses in plsql with the help of example

Q10. Explain subqueries in pl/sql with the help of an example .