

## Holiday Home work : Database Query using SQL

1)	Foreign Key in a table is used to enforce i) Data dependency ii) Referential Integrity iii) Views iv) Index Locations																														
2)	A table 'Student' contains 5 rows and 4 columns initially. 2 more rows are added and 1 more column is added . What will be the degree and cardinality of the table student after adding these rows and columns? i) 7, 5 ii) 5,7 iii) 5,5 iv) None of the above																														
3)	Insert into student values(1,'ABC','10 Hari Nagar') is a type of which command : i) DML ii) DDL iii) TCL iv) DCL																														
4)	Insert into student values(1,'ABC','10 Hari Nagar') is a type of which command : i) DML ii) DDL iii) TCL iv) DCL																														
5)	<p>In a Fashion Store's database, there is a table 'Customer' as given below.</p> <p><b>Table : Customer</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Acc_No</th> <th>Cust_Name</th> <th>Cust_City</th> <th>Cust_Phone</th> <th>Open_Bal</th> </tr> </thead> <tbody> <tr> <td>1001</td> <td>Dharmesh</td> <td>Ambala</td> <td>9710557614</td> <td>10000</td> </tr> <tr> <td>1002</td> <td>Saniya</td> <td>Patna</td> <td>8223545233</td> <td>15000</td> </tr> <tr> <td>1003</td> <td>Joe</td> <td>New Delhi</td> <td>9972136576</td> <td>13000</td> </tr> <tr> <td>1004</td> <td>Mrinal</td> <td>New Delhi</td> <td>9321305453</td> <td>12000</td> </tr> <tr> <td>1005</td> <td>Ikshaan</td> <td>Agra</td> <td>9809876798</td> <td>19000</td> </tr> </tbody> </table> <p>a) With reference to the above given table, give query for generating following output</p> <p style="margin-left: 40px;">Cust_Name Dharmesh Saniya Ikshaan</p> <p>i) Select Name from Customer where Open_bal&lt;20000; ii) Select Name from Customer where Cust_City like '%a'; iii) Select Cust_Name from Customer where Cust_City like '%a'; iv) Select Cust_name from Customer where Acc_no is not Null;</p> <p>b) Give the output of Select Cust_Name, Open_Bal from Customer order by Open_bal;</p> <p style="margin-left: 40px;">i. Cust_Name Open_Bal Dharmesh 10000 Mrinal 12000 Joe 13000 Saniya 15000 Ikshaan 19000</p>	Acc_No	Cust_Name	Cust_City	Cust_Phone	Open_Bal	1001	Dharmesh	Ambala	9710557614	10000	1002	Saniya	Patna	8223545233	15000	1003	Joe	New Delhi	9972136576	13000	1004	Mrinal	New Delhi	9321305453	12000	1005	Ikshaan	Agra	9809876798	19000
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ii. Cust\_Name Open\_Bal  
Ikshaan 19000  
Saniya 15000  
Joe 13000  
Mrinal 12000  
Dharmesh 10000

iii. Cust\_Name Open\_Bal  
Dharmesh 10000  
Ikshaan 19000  
Joe 13000  
Mrinal 12000  
Saniya 15000

- c) Pranay has given the following command to obtain Opening Balance  
Select max(Open\_Bal) from Customer where group by Cust\_City;  
but he is not getting the desired result. Help him by writing the correct command.
- a. Select max(Open\_Bal) from Customer where group by Cust\_name;
  - b. Select max(Open\_Bal) from Customer where group by Cust\_City;
  - c. Select Cust\_City,max(Open\_Bal) from Customer group by Cust\_city;
  - d. Select max(Open\_Bal) from Customer group by Cust\_name;
- d) Help Pranay find the total no. of records having open\_bal between 15000 to 20000 by selecting the right command
- i. Select total from customer;
  - ii. Select count(\*) from customer;
  - iii. Select count(\*) from customer where open\_bal between 15000 and 20000;
  - iv. Select count(\*) from customer group by open\_bal;
- e) How should Pranay write the query to find the Customers who are not living in Agra or Patna?
- i. Select \* from Customer where Cust\_City is 'Agra' or 'Patna';
  - ii. Select \* from Customer where Cust\_City not like 'Agra' or 'Patna';
  - iii. Select \* from Customer where Cust\_City not in ('Agra','Patna');
  - iv. Select \* from Customer where Cust\_City !=Agra || Cust\_Ciyu!=Patna;

6) State any two differences between single row functions and multiple row functions.  
What is the difference between the order by and group by clause when used along with the select statement. Explain with an example

7) Give the output of :  
i) Select round(123.93);  
ii) Select round(123.93,1);

8) Rohit writes the following command for a table Employee which has empno,name,sal as fields  
Select count(\*) from employee;  
Select count(sal) from employee;  
He gets the output 10 for the first command but only 8 for the second, explain why?

9) Consider the following SQL string: "Mental Toughness Helps You Succeed"  
Write commands to display following using functions:  
a. "Toughness"  
b. "Succeed"  
OR

Considering the same string: "Mental Toughness Helps You Succeed"

Write SQL commands to display:

- the position of the substring "Helps" in the string "Mental Toughness Helps You Succeed"
- the first 6 letters of the string

10 Given the table CARDEN having following data:

CCode	CarName	Company	Color	Capacity	Charges
501	A-Star	Suzuki	Red	3	14
503	Indigo	Tata	Silver	3	12
502	Innova	Toyota	White	7	15
509	Qualis	Toyota	Silver	4	14
510	Wagon R	Suzuki	Red	4	35

Write SQL Commands for the following :

- Display the average charges of each type of car company having capacity more than 3.
- Count the totalcars manufactured by each company.
- Display the total charges of all the types of vehicles.

11 Write the SQL functions which will perform the following operations:

- To display the name of the month of your birthdate .
- To remove spaces from the beginning of a string, " Python".
- To display the day of the week eg, Sunday from current date.
- To display the starting 3 characters from your name .
- To compute the power of 2 to the power 3

12 Consider the table : Shop

Id	SName	Area	Bonus	DateofOpen
S001	ABC Computronics	CP	1000.89	2010-11-20
S002	All Infotech	GK II	2345.987	2015-09-12
S003	Tech Shoppe	CP	761.46	2013-07-25
S004	Geek Tenco Soft	Nehru Place	456.923	2019-10-10
S005	Hitech Solution	GK II	1000.025	2008-12-20

- Display shop name and bonus after rounding off to zero decimal places.
- Display the position of occurrence of the string "tech" in shop names.
- Display three characters from shop name starting from second character.
- Display the month name for the date of opening of shop
- Display the name of the shop in all capitals