



INDIAN SCHOOL NIZWA - WORKSHEET

INFORMATICS PRACTICES Chapter 7 & 8 : SQL - WS2

Name: _____

Date: _____

Class: XII Sec: ____

1. Write SQL queries for (i) to (iv) and find outputs for SQL queries (v) to viii), which are based on the tables.

TRAINER

TID	TNAME	CITY	HIREDATE	SALARY
101	SUNAINA	MUMBAI	1998-10-15	90000
102	ANAMIKA	DELHI	1994-12-24	80000
103	DEEPTI	CHANDIGARG	2001-12-21	82000
104	MEENAKSHI	DELHI	2002-12-25	78000
105	RICHA	MUMBAI	1996-01-12	95000
106	MANIPRABHA	CHENNAI	2001-12-12	69000

COURSE

CID	CNAME	FEES	STARTDATE	TID
C201	AGDCA	12000	2018-07-02	101
C202	ADCA	15000	2018-07-15	103
C203	DCA	10000	2018-10-01	102
C204	DDTP	9000	2018-09-15	104
C205	DHN	20000	2018-08-01	101
C206	O LEVEL	18000	2018-07-25	105

- Display the Trainer Name, City & Salary in descending order of their Hiredate.
- To display the TNAME and CITY of Trainer who joined the Institute in the month of December 2001.
- To display TNAME, HIREDATE, CNAME, STARTDATE from tables TRAINER and COURSE of all those courses whose FEES is less than or equal to 10000.
- To display number of Trainers from each city.
- SELECT TID, TNAME, FROM TRAINER WHERE CITY NOT IN('DELHI', 'MUMBAI');
- SELECT DISTINCT TID FROM COURSE;
- SELECT TID, COUNT(*), MIN(FEES) FROM COURSE GROUP BY TID HAVING COUNT(*)>1;
- SELECT COUNT(*), SUM(FEES) FROM COURSE WHERE STARTDATE< '2018-09-15';



INDIAN SCHOOL NIZWA - WORKSHEET

2. Mr. Manav, a database administrator in “Global Educational and Training Institute” has created following table named “Training” for the upcoming training schedule:

Training

Training_Id	Name	Email_Id	Topic	City	Fee
ND01	Mr. Rajan	raj@gmail.com	Cyber Security	New Delhi	10000
GU01	Ms. Urvashi	urv@yahoo.com	ICT in Education	Gurugram	15000
FD01	Ms. Neena	neenarediff.com	Cyber Security	Faridabad	12000
ND02	Mr. Vinay	NULL	ICT in Education	New Delhi	13000
GU02	Mr. Naveen	nav@gmail.com	Cyber Security	Gurugram	NULL

Help him in writing SQL query for the following purpose:

- To count how many female candidates will be attending the training.
 - To display list of free trainings.
 - To display all the cities where Cyber Security training is scheduled along with its fee.
 - To add a column feedback with suitable data type
3. Observe the table named “Training” given above carefully and predict the output of the following queries:
- select city from training where topic = 'Cyber Security';
 - select count(Training_Id) from training where email_id like '%gmail% ';
 - select AVG (Fee) from training where Topic = 'Cyber Security';
 - select name from training where INSTR (Email_Id, '@')=0;
4. What is the degree and cardinality of the above given table named ‘Training’.
5. Write any one similarity and one difference between primary key and unique Constraint
6. Consider the following tables Library given below:

Library

Bid	Name	Author	Price	Mem_name	Issue_Date	Status
B01	Wings of Fire	A.P.J Abdul Kalam	550	Sarita	2018-05-20	Returned
B02	The Monk who sold his Ferrari	Robin Sharma	340	Simmi	2018-03-15	Not Returned
B03	You can win	Shiv Kherra	230	Rajat	2018-04-16	Returned
B04	Who moved my cheese	Spencer Jhonson	450	Ram	2018-03-17	Not Returned
B05	Real Success	Patrick Mather-Pike	250	Sia	2018-06-18	Not Returned



INDIAN SCHOOL NIZWA - WORKSHEET

- i. Suggest the suitable data type for Issue_Date column.
- ii. Suggest the suitable SQL command to change the size of column name from 30 character to 50 characters.
- iii. Mention the significance of Bid column in table Library.
- iv. Suggest the suitable command to display a list of the books in a sequence so that first all the book's name should be displayed which has been returned and after that all the book's name which has not been returned should be displayed.

7. Rishi, a class XII student has given following commands for the given purposes:

- i. To add a new column "Rating" :
update table library add column rating varchar(20);
- ii. To give an increase of 50 Rs. to all the books:
alter library set price=price+50;

Check if above given SQL commands will be able to achieve desired task or not. Justify your answer. Suggest the correction (s) if required.

8. Write SQL query to create a table "BOOKS" with the following structure:

Table: BOOKS

Field name	Datatype	Size	Constraint
BOOK_ID	Integer	2	Primary Key
BOOK_NAME	Varchar	20	
CATEGORY	Varchar	10	
ISSUE_DATE	Date		

OR

Help Ramesh in identifying any two columns for a table named student along with their suitable data type.

9. In a Bank's database, there are two tables 'Customer' and 'Transaction' as shown below.

Customer

Acc_No	Cust_Name	Cust_City	Cust_Phone	Open_Bal
2101001	Sunita	Ambala	9710557614	10000
2201002	Sandhya	Patna	8223545233	15000
2301003	Vivek	New Delhi	9972136576	13000
2401004	Meena	New Delhi	9321305453	10000



INDIAN SCHOOL NIZWA - WORKSHEET

Transaction

Trans_Id	Acc_No	Transaction_Type	Amount
Tr001	2301003	Credit	15000
Tr002	2201002	Credit	20000
Tr003	2101001	Debit	3500
Tr004	2301003	Credit	26000
Tr005	2301003	Credit	24000

Consider these tables while attempting the questions given below:

(i) Identify the candidate keys of Customer table.

OR

Briefly explain the concept of Candidate keys.

(ii) Which column can be considered as foreign key column in Transaction table?

OR

Identify Primary Key column of Transaction table.

10. With reference to the above given tables, attempt the questions given below:

i. Write a query to display customer's name who has withdrawn the money.

OR

Write a query to display customer's name along with their transaction details.

ii. Write a query to display customer's name who have not done any transaction yet.

OR

How many rows and column will be there in the Cartesian product of the above given tables. Also mention the degree and cardinality of the Cartesian product of the above given tables.

iii. Select Acc_No, sum(Amount) from Customer c, Transaction t where c.Acc_No=t.Acc_No group by c.Acc_No having Transaction_Type="Credit";

OR

Discuss the significance of having clause with group by statement with suitable example.