INDIAN SCHOOL AL WADI AL KABIR

Worksheet, 2024-2025

Class: XII	SUB: COMPUTER SCIENCE	Date of Completion:
Worksheet No:6	TOPIC : MySQL – Joins- Multiple tables	06-11-2024

1. In a database there are two tables 'Patient' and 'Doctors' are shown below-
   Table: **Patient**

Name	Patient_No	Date_Adm	Doctor_No
Kishor	P104	2009-05-15	502
Ragini	P202	2010-01-11	165
Reshu	P754	2007-12-31	325
Kanti	P612	2010-04-22	165

Table: **Doctor**

Doctor_No	Doctor_Name	Speciality
122	M. K Singh	Dentist
165	R. K. Tiwari	Neurology
325	V. K. Chauhan	Surgery
502	N. Singh	Nephrology
530	K. P. Sinha	Urology

i) Name the columns which can be made 'Primary Key' in both the tables.

ii) What will be the cardinality of Cartesian product of both the tables?

iii) Name the foreign key of Patient table.

iv) What will be the degree and cardinality of Equi Join and Non-Equi Join of both the tables?

4) Consider the tables SalesStaffInfo & SalesOffice given below:

SalesStaffInfo

EmployeeId	SalesPerson	Salary	SOID
1003	Mary Smith	2750	S10
1004	John Hunt	1825	S20
1005	Martin Hap	3475	S30

1006	Andrew	2100	S40
1007	Ivan	4730	S30

SalesOffice

SalesOfficeID	SalesOffice	OfficeNumber
S10	Chicago	312-555-1212
S20	New York	212-555-1212
S30	Houston	415-555-1212
S40	Los Angels	724-555-1212

Answer the following:

i) Display the Salesperson name and the corresponding the sales office from the matched Sales Office ID.
ii) Display the salesperson name and salary of the salesperson who are working in "New York".
iii) Display the Employee ID, Salesperson name and their office no for those employees whose salary is above $3,000.
iv) Display the Employee ID, Sales Person Name and their salary whose sales office not in "Houston" and "Chicago".
v) Increase the salary of all the employees from "Los Angeles" by 10%.
vi) Decrease the salary of the employees by 2% for those employees who are working in "Houston" office and their name start with the letter "I".

3. Consider the following tables BOOKINGS and PACKAGE and write SQL commands for (i) to (iv) and outputs for (v) and (vi).

BOOKINGS

Pcode	Tourist Name	Agency	No_of_persons	Tdate
P5	Raghavendra	Voyager	2	23-dec-10
P2	Hardep	Pristine	4	12-jan-11
P5	Shazia	Go Now	6	25-dec-10
P6	Lizza	Pristine	2	28-dec-10
P3	Diana	Voyager	4	19-mar-11
P6	Harshal	Go Now	4	21-mar-11
P1	Rajiv Khanna	Travels	12	12-apr-11
P1	Veena Sethi	Voyager	5	01-apr-11

PACKAGE

pcode	Pname	Per_Person_amt
P1	Kerala	20000
P2	Malaysia	35000
P3	Goa	56525
P4	Manali	15000
P5	Simla	12000
P6	Singapore	75450

i. Display the name of all the tourists, their travel dates, names of the places they are traveling to and the total amount to be paid by each tourist.
ii. Display the name of the agencies from the BOOKING table.
iii. Arrange the contents of the table BOOKING in ascending order of travel date.
iv. Display the maximum no_of_persons traveling of each travel agency.
v. SELECT Tourist Name, Agency, Pname from BOOKINGS, PACKAGE where BOOKINGS.Pcode = PACKAGES.Pcode and Per_person_amt>3500;
vi. SELECT Agency, sum(No_of_persons) from BOOKING group by agency having sum(No_of_persons)>10;

4. Consider these two tables and write output for (I to iii) and SQL query for (iv to vii).
Table : ITEMS

ID	PNAME	PRICE	MDATE	QTY
T001	Soap	12.00	11/03/2007	200
T002	Paste	39.50	23/12/2006	55
T003	Deodorant	125.00	12/06/2007	46
T004	Hair Oil	28.75	25/09/2007	325
T005	Cold Cream	66.00	09/10/2007	144
T006	Tooth Brush	25.00	17/02/2006	455

TABLE : COMPANY		
ID	COMP	City
T001	HLL	Mumbai
T008	Colgate	Delhi
T003	HLL	Mumbai
T004	Paras	Haryana
T009	Ponds	Noida
T006	Wipro	Ahmedabad

(i) SELECT SUM(QTY) FROM ITEMS WHERE PNAME LIKE ‘H%’ OR PNAME LIKE ‘T%’
(ii) SELECT COUNT(*) FROM ITEMS WHERE QTY > 100;
(iii) SELECT QTY FROM ITEMS WHERE ID > ’TOO3’;
(iv) To display PNAME, PRICE * QTY only for the where price is greater than 100
(v) To display company name & city for ID= T001 and T008
(vi) To delete the items produced before 2007.
(vii) To increase the quantity by 20 for soap and paste.

5. Observe the following tables, TEACHER and DEPARTMENT carefully and answer the question that follow :

TABLE: TEACHER

TNO	TNAME	DOJ	DNO
T1	NIKHIL	2012-09-02	D3
T2	SAMIT	2014-12-30	D2
T3	RAJ	2013-09-15	D2

TABLE: DEPARTMENT

DNO	DNAME
D1	PHYSICS
D2	MATHS
D3	ACCOUNTS
D4	IT

i. What will be the output of :

SELECT * FROM TEACHER NATURAL JOIN DEPARTMENT;

ii. What will be the cardinality and degree of the cartesian product of the above two tables?