Revision

Presented by
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NOTE : Write SQL commands for(b) to (g) and write the output for (h) on the basis of table HOSPITAL.

TABLE : HOSPITAL

No	Name	Age	Department	Datofadm	Charges	Sex
1	Sandeep	65	Surgery	23/02/98	300	M
2	Ravina	24	Orthopedic	20/01/98	200	F
3	Karan	45	Orthopedic	19/02/98	200	M
4	Tarun	12	Surgery	01/01/98	300	M
5	Zubin	36	ENT	12/02/98	250	M
6	Ketaki	16	ENT	24/02/98	300	F
7	Ankita	29	Cardiology	20/02/98	800	F
8	Zareen	45	Gynecology	22/02/98	300	F
9	Kush	19	Cardiology	13/01/98	800	M
10	Shaliya	31	Nuclear Medicine	19/02/98	400	M

(b) To show all information about the patients of cardiology department.

Ans: SELECT * FROM hospital WHERE department='Cardiology';

(c) To list the names of female patients who are in orthopedic dept.

Ans: SELECT name FROM hospital WHERE sex='F' AND department='Orthopedic';

(d) To list names of all patients with their date of admission in ascending order.

Ans.: SELECT name, dateofadm FROM hospital ORDER BY dateofadm;

(e) To display Patient's Name, Charges, age for male patients only.

Ans: SELECT name, charges, age FROM hospital WHERE sex='M';

(f) To count the number of patients with age >20.

Ans.: SELECT COUNT(age) FROM hospital WHERE age>20;

(g) To insert a new row in the HOSPITAL table wit the following .

11,"mustafa",37,"ENT",(25/02/98},250,"M"

Ans.: INSERT INTO hospital VALUES (11, 'Mustafa', 37, 'ENT', '25/02/98', 250, 'M');

NOTE : Write SQL commands for(b) to (g) and write the output for (h) on the basis of table HOSPITAL.

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9	Kush	19	Cardiology	13/01/98	800	M
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(h) Give the output of following SQL statement:

(i) Select COUNT(distinct departments) from HOSPITAL;

Ans: COUNT(DISTICNTDEPARTMEN)

6

(ii) Select Max (Age) from HOSPITAL where SEX = "M";

Ans: MAX(AGE)

65

(iii) Select AVG(Charges) from HOSPITAL where SEX = " F";

Ans.: AVG(CHARGES)

400

(iv) Select SUM(Charges) from HOSPITAL where Datofadm<{12/02/98}

Ans.: SUM(CHARGES)

1300

Note: Write SQL commands for(b) to (e) and write the outputs for (f) on the basis of table GRADUATE.

TABLE : GRADUATE

S No	NAME	Stipend	Subject	Average	Div
1	Karan	400	Physics	68	1
2	Divakar	450	Computers	68	1
3	Divya	300	Chemistry	62	2
4	Arun	350	Physics	63	1
5	Sabina	500	Mathematics	70	1
6	John	400	Chemistry	55	2
7	Robert	250	Physics	64	1
8	Rubina	450	Mathematics	68	1
9	Vikas	500	Computers	62	1
10	Mohan	300	Mathematics	57	2

(b) List the names of those students who obtained DIV 1 sorted by NAME .

Ans.: SELECT name FROM graduate WHERE div=1 ORDER BY name;

(c)Display a report, listing NAME , STIPEND , SUBJCT and amount of stipend received in a year assuming that the STIPEND is paid every month.

Ans.: SELECT name, stipend, subject, stipend *12 FROM graduate;

(d) To insert a new row in the GRADUATE table :

11,"KAJOL",300," COMPUTERS",75,1

Ans.: INSERT INTO graduate VALUES (11, 'Kajol', 300, 'Computers', 75,1);

(h) Give the output of the following SQL statements based on table GRADUATE :

(i) Select MIN(AVERAGE) from GRADUATE where SUBJECT="PHYSICS";

Ans. MIN(AVERAGE)

63

(ii)Select SUM(STIPEND) from GRADUATE where DIV=1;

Ans.: SUM(STIPEND)

2900

(iii)Select AVG(STIPEND) from GRADUATE where AVERAGE >=65;

Ans.: AVG(STIPEND)

450

(vi) Select COUNT(distinct SUBJECT) from GRADUATE;

Ans.: COUNT(DISCTINCTSUBJECT)

4

(b) Given the following Teacher relation : Write SQL command for question (b) to (g)

No	Name	Department	Dteofjoining	Salary	Sex
1	Raja	Computer	21/05/98	8000	M
2	Sangita	History	21/05/97	9000	F
3	Ritu	Sociology	29/08/98	8000	F
4	Kumar	Linguistics	13/06/96	10000	M
5	Venkat	History	31/10/99	8000	M
6	Sidhu	Computer	21/05/86	14000	M
7	Aishwarya	Sociology	11/01/88	12000	F

(c) To select all the information of teacher in computer department.

Ans.: SELECT * FROM teacher WHERE department= 'Computer';

(d) To list the name of female teachers in History department.

SELECT name FROM teacher WHWRE sex= 'F' AND department = 'History';

(e) To list all names of teachers with date of admission in ascending order.

Ans.: SELECT name, dateofjoining FROM teacher ORDER BY dateofjoining;

(f) TO display Teacher's name, Department, and Salary of female teacher.

Ans.: SELECT name, department, salary FROM teacher WHERE sex= 'F';

(g) To count the number of items whose salary is less than 10,000.

Ans. SELECT COUNT(*) FROM teacher WHERE salary<10000;

(h) To insert a new record in the Teacher table with thefollowing data:
8,"Mersha","computer",{1/1/2000},12000,"m".

Ans.: INSERT INTO teacher VALUES (8, 'Mersha', 'Computer', '01/01/2000',12000, 'M');

(b) Given the following Teacher relation : Write SQL command for question (b) to (g)

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1	Raja	Computer	21/05/98	8000	M
2	Sangita	History	21/05/97	9000	F
3	Ritu	Sociology	29/08/98	8000	F
4	Kumar	Linguistics	13/06/96	10000	M
5	Venkat	History	31/10/99	8000	M
6	Sidhu	Computer	21/05/86	14000	M
7	Aishwarya	Sociology	11/01/88	12000	F

1.SELECT MIN(DISTINCT Salary) FROM Teacher;

Ans.: MIN(DISTINCTSALARY)

8000

2. SELECT MIN (Salary) FROM Teacher WHERE Sex = "M";

Ans.: MIN(SALARY)

8000

3. SELECT SUM(Salary) FROM Teacher WHERE Department = "HISTORY";

Ans.: SUM(SALARY)

17000

4. SELECT AVG(Salary) FROM Teacher WHERE Dateofjoining < {1/1/98}

Ans. AVG(SALARY)

11250

Table: Books

Book_Id	Book_Name	Author_Name	Publishers	Price	Type	Quantity
F001	The Tears	William Hopkins	First Publ.	750	Fiction	10
F002	Thunderbolts	Anna Roberts	First Publ.	700	Fiction	5
T001	My First C++	Brian & Brooke	EPB	250	Text	10
T002	C++ Brainworks	A.W.Rossaine	TDH	325	Text	5
C001	Fast Cook	Lata Kapoor	EPB	350	Cookery	8

Table: Issued

Book_Id	Quantity_Issued
F001	3
T001	1
C001	5

Write SQL queries fro (b) to (g):

b) To show Book name, Author Name and price of books of EPB publishers.

Ans.: SELECT Book_name, author_name, price FROM books WHERE publishers= 'EPB';

c) To list the name of books of Fiction type

Ans.: SELECT book_name FROM books WHERE type= 'Fiction';

d) To display the name and price of the books in descending order of their price.

Ans.: SELECT book_name, price FROM books ORDER BY price DESC;

e) To increase the price of all books of First Publ. by 50

Ans.: UPDATE books SET price=price+50 WHERE publishers = 'First Publ.';

f) To display the Book_Id, Book_Name and Quantity_Issued for all books which have been issued. (The query will require contents from both tables)

Ans.: SELECT Book_id, book_name, quantity_issued FROM books, issued WHERE books.book_id = issued.book_id;

g) To insert a new row in the table Issued having the following data:
"F001", 4

Ans.: INSERT INTO issued VALUES ('F002',4);

Table: Books

Book_Id	Book_Name	Author_Name	Publishers	Price	Type	Quantity
F001	The Tears	William Hopkins	First Publ.	750	Fiction	10
F002	Thunderbolts	Anna Roberts	First Publ.	700	Fiction	5
T001	My First C++	Brian & Brooke	EPB	250	Text	10
T002	C++ Brainworks	A.W.Rossaine	TDH	325	Text	5
C001	Fast Cook	Lata Kapoor	EPB	350	Cookery	8

Table: Issued

Book_Id	Quantity_Issued
F001	3
T001	1
C001	5

h) Give the output of the following queries based on the above tables.

i) Select count(distict publichers) from books;

```
i)   COUNT(DISTINCTPUBLISHERS)
     -----------------------------
                   3
```

ii) Select sum(price) from books where quantity>5;

```
ii) SUM(PRICE)
    ----------
      1350
```

iii) Select book_name, author_name from books where price<500;

```
iii) BOOK_NAME          AUTHOR_NAME
     ---------          -----------
     My First C++       Brain & Brooks
     C++ Brainworks     A.W. Rossaine
     Fast Cook          Lata Kapoor
```

iv) Select count(*) from books;

```
iv)   COUNT(*)
      --------
         5
```