Name - Indranil Bain Enrollment NO. - 2020CSB039

Branch - Computer Science and Technology Group - GX

Subject - DBMS Laboratory

<u>Assignment - 3</u>

Q1)

<A. Creation of tables:>

SAILORS Table

create table SAILORS(

- -> s_id varchar(10) primary key,
- -> s_name varchar(10),
- -> rating double(2,1),
- -> age int);

Field	Туре	Ì	Null	† -	Key	Default	Extra
s_name rating	varchar(10) varchar(10) double(2,1) int(11)	İ	YES YES			NULL NULL NULL NULL	

After insertion of values:-

+ s_id	s_name	rating	age
10	Tarun	8.5	56
11	Greg	9.9	70
12	Roy	9.0	44
13	Hennessy	6.8	20
14	Nevada	7.7	60
15	Paul	7.5	40
16	Shannon	2.2	98
+	+	+	++

BOATS Table

create table BOATS(

- -> b_id varchar(10) primary key,
- -> b_name varchar(10),
- -> color varchar(10));

Field	Type	Null	Key	Default	Extra
b_id b_name	varchar(10) varchar(10) varchar(10)	NO YES	PRI	NULL NULL	

b_id	b_name	color
20	Cruisey	Red
21	Wavezzz	Blue
22	ShoreMe	Green
23	SailFree	Yellow
24	Waterways	Red

RESERVES Table

create table RESERVES(

s_id varchar(10) references SAILORS(s_id),b_id
varchar(10) references BOATS(b_id), day varchar(10),
primary key(s_id, b_id));

Field	Type 	Null	Key	Default	Extra
s_id b_id	varchar(10) varchar(10) varchar(10)	NO NO	PRI PRI	NULL	

After insertion of values:-



<B. Queries >

a) Find the color of boats reserved by Tarun.

select color

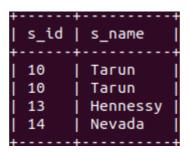
from BOATS B, SAILORS S, RESERVES R

where S.s_name='Tarun' and S.s_id=R.s_id and B.b_id=R.b_id;

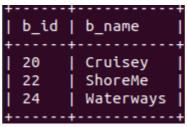


b) Find sailor id's and sailor names who have reserved boats on Monday.

select S.s_id, s_name from SAILORS S,RESERVES R where S.s_id=R.s_id and R.day='MONDAY';



c) List boat id's and boat names for green and red colors only. select b_id,b_name from BOATS where color='Red' or color='Green';



d) Delete all sailors' information whose age is greater than 60. delete from SAILORS where age>60;

After deletion:

+ s_id	s_name	rating	age
10	Tarun	8.5	56
12	Roy	9.0	44
13	Hennessy	6.8	20
14	Nevada	7.7	60
15	Paul	7.5	40

Q2)

<A. Creation of tables:>

TEACHER Table

create table TEACHER(

- -> Tid int primary key,
- -> name varchar(20),
- -> Dept varchar(20));

Field	Туре	Ĭ	Null	į	Key	İ	Default	Extra
name	int(11) varchar(20) varchar(20)	i.	YES	į		į	NULL	

After insertion of values:-

Tid	name	Dept
11 12 13	Britney Lucas Warren	Physics Physics Computer Science Chemistry Mathematics

Subject Table

create table Subject(

- -> Subno int primary key,
- -> SubTitle varchar(20));

Field	Null Key	Default	Extra
Subno int(11) SubTitle varchar(20)	NO PRI		

After insertion of values:-

Subno	SubTitle
21	Thermodynamics DBMS Integration Alcohols Data Structures

TaughtBy Table

create table TaughtBy(

->Tid int references TEACHER(Tid),

- -> Subno int references Subject(Subno),
- -> primary key(Tid,Subno));

Field	Type	Null	Key	Default	Extra
Tid	int(11)	NO	PRI	NULL	
Subno	int(11)	NO	PRI	NULL	

After insertion of values:-

	Tid	Subno
i	10	20
Ĺ	11	20
Ĺ	12	21
Ĺ	12	24
Ĺ	13	23
1	14	22
+ -		++

Student Table

create table Student(

- -> RollNo int primary key,
- -> Sname varchar(20),
- -> City varchar(20));

Field	Туре	į	Null	† -	Key		Default	Extra
Sname	int(11) varchar(20) varchar(20)	İ	YES	Ĺ	į	İ	NULL	

After insertion of values:-

RollNo	Sname	City
21 23 25 38	Alexis	Pune Kolkata Kolkata Kolkata Bangalore Chennai

<B. Queries >

a) Get names of all teachers of Physics dept who teach Thermodynamics.

select Name

from TEACHER T, Subject S, Taught By TB

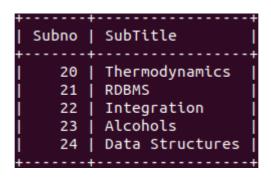
where TB.Tid=T.Tid and TB.Subno=S.Subno and Dept='Physics' and SubTitle='Thermodynamics';



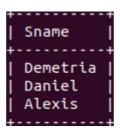
b) Rename subject DBMS to RDBMS.

update Subject
set SubTitle='RDBMS' where
SubTitle='DBMS';

After updating:



c) Find all students who stay in Kolkata and have roll number between 20and 25. select Sname from Student where City='Kolkata' and RollNo between 20 and 25;



d) Display all students information in descending order of their rollnumber who stay in Kolkata.

select * from Student where City='Kolkata' order by Rollno desc;

RollNo	Sname	City
25 23		Kolkata Kolkata Kolkata