WEST BENGAL STATE UNIVERSITY

RESGISTRATION NO : 1071711100060 OF 2017
ROLL : 3201134   NO : 19162
SUBJECT : SQL ASSIGNMENT 1.
PAPER : CMSA-VIII
PART- III

SCHEMA

Sailor - SID,SNAME,CITY,AGE
Boat – BID,BNAME,COLOR
Reserve – SID,BID,DAY

1. Create table sailor.

create table Sailor(sid varchar(10)primary key,sname varchar(15) not null,city varchar(16) not null,age integer not null)

Table created.

0.16 seconds
2. Create table boat.

create table Boat(bid varchar(10) primary key,bname varchar(15) not null, color varchar(10) not null)

Table created.

3. Create table reserve.
create table Reserve(sid varchar(10) not null, bid varchar(10) not null ,day varchar(8) not null, primary key(sid, bid), foreign key(sid) references Sailor(sid),
foreign key(bid) references Boat(bid));

4. Insert data into table 'sailor'.

insert into Sailor values (1, 'Ram', 'Viskhapattnam', 23);
insert into Sailor values (2, 'Shyam','Belghoria', 30);
insert into Sailor values (3, 'Arnab','AAMTA' , 21);
insert into Sailor values (4, 'Subho','Dum dum' ,24);
insert into Sailor values (5, 'Animesh','Shyamnagar',22);
insert into sailor   values (6,'Tirthajit','sodepur',23)

5. Insert data into table 'boat'.

insert into Boat values (101, 'Interlake', 'blue');
insert into Boat values (102, 'Interlake', 'red');
insert into Boat values (103, 'Clipper', 'green');
insert into Boat values (104, 'Marine', 'red');

6. Insert into table 'reserve'.

insert into Reserve values (1, 101, 'Sunday');
insert into Reserve values (1, 102, 'Sunday');
insert into Reserve values (2, 101, 'Tuesday');
insert into Reserve values (2, 102, 'Friday');
insert into Reserve values (3, 102, 'Wed');
insert into Reserve values (3, 101, 'Wed');
insert into Reserve values (4, 102, 'Monday');
insert into Reserve values (4, 103, 'Thusday');

7. Find the name of all sailors.

SQL> select sname from Sailor;

SNAME

Ram
Shyam
Arnab
Subho
Animesh
Tirthajit

6 rows selected.

8. Find the name of the youngest sailor.
SQL> select s.sname, s.age from Sailor s where s.age<=all(select age from Sailor
);

SNAME   AGE
--------------- ----------
Arnab   21

9. Find the name of the sailors who are younger than Ram.

SQL> select s.sname, s.age from Sailor s where s.age<=23;

SNAME   AGE
--------------- ----------
Ram   23
Arnab   21
Animesh   22
Tirthajit   23

10. Find the name of the sailors who are from 'Visakhapattnam'.

SQL>Select s.sname from Sailosr s
where s.city='Visakhapattnam';

SNAME

Ram

11. Find the average age of all sailors.

SQL> select avg(age) from Sailor;

  AVG(AGE)

23.8333333

12. Find the name of all boats.
SQL> select bname from Boat;

BNAME

Interlake
Interlake
Clipper
Marine

13. Find the name of all red color boats.

SQL> select b.bname from Boat b where b.color='red';

BNAME

Interlake
Marine

14. Find the name of all sailors who reserve red color boats.

SQL> select s.sname from Sailor s, Reserve r, Boat b where s.sid=r.sid and r.bi
=b.bid and b.color='red';

SNAME

Ram
Shyam
Arnab
Subho

15. Find the name of all boats reserved by Shyam.

SQL>select b.bname from Sailor s , Reserve r, Boat b where s.sid=r.sid and r.bid=b.bid and
s.sname= 'shyam';

BNAME

Interlake
Interlake

16. Find the name of all sailors who reserved red or green boats.

SQL> select s.sname
  2 from Sailor s, Boat b, Reserve r
  3 where s.sid=r.sid and r.bid=b.bid
  4 and(b.color='red' or b.color='green');

SNAME

Ram
Shyam
Arnab
Subho
Subho

17. Find the name of all sailors who reserved red and green boats.

SQL> select s.sname
  2 from Sailor s, Boat b, Reserve r
  3 where s.sid=r.sid and r.bid=b.bid
  4 and b.color='red'
  5 intersect
  6 select s.sname
  7 from Sailor s, Boat b, Reserve r
  8 where s.sid=r.sid and r.bid=b.bid
  9 and b.color='green' ;

SNAME

Subho

18. Find the name of all sailors who reserved red but not green boats.
SQL> select s.sname
  2 from Sailor s, Boat b , Reserve r
  3 where s.sid=r.sid and r.bid=b.bid and b.color='red'
  4 minus
  5 select s2.sid
  6 from Sailor s2, Boat b2, Reserve r2
  7 where s2.sid=r2.sid and r2.bid=b2.bid and b2.color='green';

SNAME

Arnab
Ram
Shyam
Subho

19. Find the name of the sailors who reserved green but not red boats
SQL> select s.sname
  2 from Sailor s, Boat b , Reserve r
  3 where s.sid=r.sid and r.bid=b.bid and b.color='green'

```
4  minus
5  select s2.sid
6  from Sailor s2, Boat b2, Reserve r2
7  where s2.sid=r2.sid and r2.bid=b2.bid and b2.color='red';
```

SNAME

Subho.

20. Find the name of the sailors who reserved maximum number of boats

21. Find the name of sailors who reserved all boats
```
SQL>select s.sname
  2 from Sailors s
  3 where not exits
  4 ((select b.bid from Boat b) except
  5 (select r.bid from Reserve r where r.sid = s.sid));
```

SNAME
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22. Find the name of sailors who reserved all red color boats.
```
SQL> select s.sname
  2  from Sailor s, Boat b , Reserve r
  3  where s.sid=r.sid and r.bid=b.bid and b.color='red';
```

SNAME

Ram
Shyam
Arnab
Subho