1 . Create a table sailors with following attribute sid,sname,rating,age

```sql
1  create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2  insert into sailors values(50,'Hortio',6.5,56);
3  insert into sailors values(52,'Dennis',10,45);
4  insert into sailors values(54,'Ajay',7.5,63);
5  insert into sailors values(56,'Mathew',10,38);
6  select * from sailors;
```

▶ Run (Ctrl-Enter) ◄ MySQL books

Output Input Comments **0**

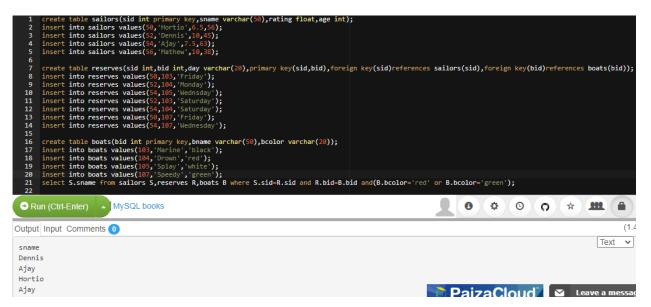| sid	sname	rating	age
50	Hortio	6.5	56
52	Dennis	10	45
54	Ajay	7.5	63
56	Mathew	10	38

2 . Create another table reserves with the attributes sid,bid,day

```sql
1   create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(50,'Hortio',6.5,56);
3   insert into sailors values(52,'Dennis',10,45);
4   insert into sailors values(54,'Ajay',7.5,63);
5   insert into sailors values(56,'Mathew',10,38);
6
7   create table boats(bid int primary key,bname varchar(50),bcolor varchar(20));
8   insert into boats values(103,'Marine','black');
9   insert into boats values(104,'Drown','red');
10  insert into boats values(105,'Splay','white');
11  insert into boats values(107,'Speedy','green');
12  select * from boats;
13
```

▶ Run (Ctrl-Enter) ◄ MySQL books

Output Input Comments **0**

bid	bname	bcolor
103	Marine	black
104	Drown	red
105	Splay	white
107	Speedy	green

3 . Create a table boat with attributes bid,bname and bcolor

```
1   create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(50,'Hortio',6.5,56);
3   insert into sailors values(52,'Dennis',10,45);
4   insert into sailors values(54,'Ajay',7.5,63);
5   insert into sailors values(56,'Mathew',10,38);
6
7   create table reserves(sid int,bid int,day varchar(20),primary key(sid,bid),foreign key(sid)references sailors(sid),foreign key(bid)references boats(bid));
8   insert into reserves values(50,301,'Friday');
9   insert into reserves values(52,303,'Monday');
10  insert into reserves values(54,305,'Wednsday');
11  insert into reserves values(50,303,'Saturday');
12  insert into reserves values(54,303,'Saturday');
13  insert into reserves values(54,301,'Friday');
14  insert into reserves values(54,307,'Wednesday');
15
16  create table boats(bid int primary key,bname varchar(50),bcolor varchar(20));
17  insert into boats values(103,'Marine','black');
18  insert into boats values(104,'Drown','red');
19  insert into boats values(105,'Splay','white');
20  insert into boats values(107,'Speedy','green');
21  select * from reserves;
22
```

Run (Ctrl-Enter) ▲ MySQL books

Output Input Comments **0**

sid	bid	day
50	301	Friday
52	303	Monday
54	305	Wednsday
50	303	Saturday
54	303	Saturday

4 . Find the names of sailors who have reserved a red or a green boat

```
1   create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(50,'Hortio',6.5,56);
3   insert into sailors values(52,'Dennis',10,45);
4   insert into sailors values(54,'Ajay',7.5,63);
5   insert into sailors values(56,'Mathew',10,38);
6
7   create table reserves(sid int,bid int,day varchar(20),primary key(sid,bid),foreign key(sid)references sailors(sid),foreign key(bid)references boats(bid));
8   insert into reserves values(50,103,'Friday');
9   insert into reserves values(52,104,'Monday');
10  insert into reserves values(54,105,'Wednsday');
11  insert into reserves values(52,103,'Saturday');
12  insert into reserves values(54,104,'Saturday');
13  insert into reserves values(50,107,'Friday');
14  insert into reserves values(54,107,'Wednesday');
15
16  create table boats(bid int primary key,bname varchar(50),bcolor varchar(20));
17  insert into boats values(103,'Marine','black');
18  insert into boats values(104,'Drown','red');
19  insert into boats values(105,'Splay','white');
20  insert into boats values(107,'Speedy','green');
21  select S.sname from sailors S,reserves R,boats B where S.sid=R.sid and R.bid=B.bid and(B.bcolor='red' or B.bcolor='green');
22
```

Run (Ctrl-Enter) ▲ MySQL books

Output Input Comments **0**

sname
Dennis
Ajay
Hortio
Ajay

5 . Find the names of sailors who have represent both a red or a green boat

```
1   create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(50,'Hortio',6.5,56);
3   insert into sailors values(52,'Dennis',10,45);
4   insert into sailors values(54,'Ajay',7.5,63);
5   insert into sailors values(56,'Mathew',10,38);
6
7   create table reserves(sid int,bid int,day varchar(20),primary key(sid,bid),foreign key(sid)references sailors(sid),foreign key(bid)references boats(bid));
8   insert into reserves values(50,103,'Friday');
9   insert into reserves values(52,104,'Monday');
10  insert into reserves values(54,105,'Wednsday');
11  insert into reserves values(52,103,'Saturday');
12  insert into reserves values(54,104,'Saturday');
13  insert into reserves values(50,107,'Friday');
14  insert into reserves values(54,107,'Wednesday');
15
16  create table boats(bid int primary key,bname varchar(50),bcolor varchar(20));
17  insert into boats values(103,'Marine','black');
18  insert into boats values(104,'Drown','red');
19  insert into boats values(105,'Splay','white');
20  insert into boats values(107,'Speedy','green');
21  select sid,sname from sailors where sid in(select sid from reserves where bid in (select bid from boats where bcolor in('red','green')));
```

Run (Ctrl-Enter) ▲ MySQL books

Output Input Comments **0**

sid	sname
50	Hortio
52	Dennis
54	Ajay

6 . Find the sid's of all sailors who reserved a red boat but not a green boat

```
1   create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(50,'Hortio',6.5,56);
3   insert into sailors values(52,'Dennis',10,45);
4   insert into sailors values(54,'Ajay',7.5,63);
5   insert into sailors values(56,'Mathew',10,38);
6
7   create table reserves(sid int,bid int,day varchar(20),primary key(sid,bid),foreign key(sid)references sailors(sid),foreign key(bid)references boats(bid));
8   insert into reserves values(50,103,'Friday');
9   insert into reserves values(52,104,'Monday');
10  insert into reserves values(54,105,'Wednsday');
11  insert into reserves values(52,103,'Saturday');
12  insert into reserves values(54,104,'Saturday');
13  insert into reserves values(50,107,'Friday');
14  insert into reserves values(54,107,'Wednesday');
15
16  create table boats(bid int primary key,bname varchar(50),bcolor varchar(20));
17  insert into boats values(103,'Marine','black');
18  insert into boats values(104,'Drown','red');
19  insert into boats values(105,'Splay','white');
20  insert into boats values(107,'Speedy','green');
21  select S.sid from sailors S.reserves R.boats B where S.sid=R.sid and R.bid=B.bid and B.bcolor='green'except S2.sid from sailors S2.reserves R2.boats B2
22  where S2.sid-R2.sid and R2.bid=B2.bid and B2.bcolor='green';
```

Run (Ctrl-Enter) ▲ MySQL books

Output Runtime error Input Comments **0**   (1.54 se

```
ERROR 1064 (42000) at line 22: You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax
to use near '.reserves R.boats B where S.sid=R.sid and R.bid=B.bid and B.bcolor='green'except' at line 1
```

7 . Find all sid of sailors who have a rating of 10 or have reserved boat 104

```
1   create table sailors(sid int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(50,'Hortio',6.5,56);
3   insert into sailors values(52,'Dennis',10,45);
4   insert into sailors values(54,'Ajay',7.5,63);
5   insert into sailors values(56,'Mathew',10,38);
6
7   create table reserves(sid int,bid int,day varchar(20),primary key(sid,bid),foreign key(sid)references sailors(sid),foreign key(bid)references boats(bid));
8   insert into reserves values(50,103,'Friday');
9   insert into reserves values(52,104,'Monday');
10  insert into reserves values(54,105,'Wednsday');
11  insert into reserves values(52,103,'Saturday');
12  insert into reserves values(54,104,'Saturday');
13  insert into reserves values(50,107,'Friday');
14  insert into reserves values(54,107,'Wednesday');
15
16  create table boats(bid int primary key,bname varchar(50),bcolor varchar(20));
17  insert into boats values(103,'Marine','black');
18  insert into boats values(104,'Drown','red');
19  insert into boats values(105,'Splay','white');
20  insert into boats values(107,'Speedy','green');
21  select S.sid from sailors S where S.rating=10 union select R.sid from reserves R where R.bid=104;
```

Run (Ctrl-Enter) ▲ MySQL books

Output Input Comments **0**   (1.

Text ▾

sid
52
56
54