Create table Sailors with following attributes 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(21,"harri",9,55);
3  insert into sailors values(22,"bibin",8,45);
4  insert into sailors values(23,"manu",8.5,50);
5  insert into sailors values(24,"appu",9.5,35);
6  insert into sailors values(25,"jibu",5.5,48);
7  select * from sailors;
```

▶ Run (Ctrl-Enter)   ▲   MySQL books

Output Input Comments ⓪

SID	sname	rating	age
21	harri	9	55
22	bibin	8	45
23	manu	8.5	50
24	appu	9.5	35
25	jibu	5.5	48

Create table Boat with attributes Bid, Name and Color

```sql
1   create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(21,"harri",9,55);
3   insert into sailors values(22,"bibin",8,45);
4   insert into sailors values(23,"manu",8.5,50);
5   insert into sailors values(24,"appu",9.5,35);
6   insert into sailors values(25,"jibu",5.5,48);
7
8
9   create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10  insert into boats values(98,"island","blue");
11  insert into boats values(99,"marine","green");
12  insert into boats values(100,"speed","red");
13  insert into boats values(101,"wind","white");
14  select * from boats;
15
16
```

▶ Run (Ctrl-Enter)   ▲   MySQL books

Output Input Comments ⓪

BID	bname	bcolor
98	island	blue
99	marine	green
100	speed	red
101	wind	white

Create table Reserves with the attributes Sid, Bid, Date

```sql
1   create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(21,"harri",9,55);
3   insert into sailors values(22,"bibin",8,45);
4   insert into sailors values(23,"manu",8.5,50);
5   insert into sailors values(24,"appu",9.5,35);
6   insert into sailors values(25,"jibu",5.5,48);
7
8
9   create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10  insert into boats values(98,"island","blue");
11  insert into boats values(99,"marine","green");
12  insert into boats values(100,"speed","red");
13  insert into boats values(101,"wind","white");
14
15
16  create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17  insert into  reserves values(22,99,"monday");
18  insert into  reserves values(23,100,"wednesday");
19  insert into  reserves values(22,99,"friday");
20  insert into  reserves values(24,101,"sunday");
21  select * from  reserves;
22
23
```

⚡ Run (Ctrl-Enter) ▲   MySQL books

Output Input Comments 0

SID	BID	day
22	99	friday
22	99	monday
23	100	wednesday
24	101	sunday

1. Find the names of sailors who have not reserved a red boat

```sql
1   create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(21,"harri",9,55);
3   insert into sailors values(22,"bibin",8,45);
4   insert into sailors values(23,"manu",8.5,50);
5   insert into sailors values(24,"appu",9.5,35);
6   insert into sailors values(25,"jibu",5.5,48);
7
8
9   create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10  insert into boats values(98,"island","blue");
11  insert into boats values(99,"marine","green");
12  insert into boats values(100,"speed","red");
13  insert into boats values(101,"wind","white");
14
15
16  create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17  insert into  reserves values(22,99,"monday");
18  insert into  reserves values(23,100,"wednesday");
19  insert into  reserves values(22,99,"friday");
20  insert into  reserves values(24,101,"sunday");
21  select S.sname from sailors S where S.sid not in(select R.sid from reserves R where R.bid in (select B.bid from boats B where B.bcolor='red'));
22
23
```

⚡ Run (Ctrl-Enter) ▲   MySQL books

Output Input Comments 0

sname
harri
bibin
appu
jibu

2.Find the sailors whose rating is better than some sailor called "Harri"

```sql
1   create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(21,"harri",9,55);
3   insert into sailors values(22,"bibin",8,45);
4   insert into sailors values(23,"manu",8.5,50);
5   insert into sailors values(24,"appu",9.5,35);
6   insert into sailors values(25,"jibu",5.5,48);
7
8
9   create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10  insert into boats values(98,"island","blue");
11  insert into boats values(99,"marine","green");
12  insert into boats values(100,"speed","red");
13  insert into boats values(101,"wind","white");
14
15
16  create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17  insert into  reserves values(22,99,"monday");
18  insert into  reserves values(23,100,"wednesday");
19  insert into  reserves values(22,99,"friday");
20  insert into  reserves values(24,101,"sunday");
21  select S.sname,S.rating from sailors S where S.rating >any(select S2.rating from sailors S2 where S2.sname='harri');
22
23
```

Save and Run

▶ Run (Ctrl-Enter) ▲   MySQL books

Output Input Comments 0

```
sname   rating
appu    9.5
```

3.Find the sailors with highest rating

```sql
1   create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(21,"harri",9,55);
3   insert into sailors values(22,"bibin",8,45);
4   insert into sailors values(23,"manu",8.5,50);
5   insert into sailors values(24,"appu",9.5,35);
6   insert into sailors values(25,"jibu",5.5,48);
7
8
9   create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10  insert into boats values(98,"island","blue");
11  insert into boats values(99,"marine","green");
12  insert into boats values(100,"speed","red");
13  insert into boats values(101,"wind","white");
14
15
16  create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17  insert into  reserves values(22,99,"monday");
18  insert into  reserves values(23,100,"wednesday");
19  insert into  reserves values(22,99,"friday");
20  insert into  reserves values(24,101,"sunday");
21  select * from sailors S where S.rating>=all(select S2.rating from sailors S2);
22
```

Save and Run

▶ Run (Ctrl-Enter) ▲   MySQL books

Output Input Comments 0

```
SID     sname   rating  age
24      appu    9.5     35
```

4.Find the names of sailors who have reserved all boats

```sql
1   create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2   insert into sailors values(21,"harri",9,55);
3   insert into sailors values(22,"bibin",8,45);
4   insert into sailors values(23,"manu",5.5,50);
5   insert into sailors values(24,"appu",9.5,35);
6   insert into sailors values(25,"jibu",6.5,48);
7
8
9   create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10  insert into boats values(98,"island","blue");
11  insert into boats values(99,"marine","green");
12  insert into boats values(100,"speed","red");
13  insert into boats values(101,"wind","white");
14
15
16  create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17  insert into  reserves values(22,98,"monday");
18  insert into  reserves values(23,100,"wednesday");
19  insert into  reserves values(22,99,"friday");
20  insert into  reserves values(24,101,"sunday");
21  insert into  reserves values(23,101,"wednesday");
22  insert into  reserves values(22,100,"friday");
23  insert into  reserves values(22,101,"sunday");
24  select S.sname from sailors S where not exists(select B.bid from boats B where not exists(select R.bid from reserves R where R.bid=B.bid and R.sid=S.sid));
25
```

Save and Run

▶ Run (Ctrl-Enter) ▲   MySQL books

Output Input Comments 0

```
sname
bibin
```

5. Find the name and age of the oldest sailor

```
1  create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2  insert into sailors values(21,"harri",9,55);
3  insert into sailors values(22,"bibin",8,45);
4  insert into sailors values(23,"manu",5.5,50);
5  insert into sailors values(24,"appu",9.5,35);
6  insert into sailors values(25,"jibu",6.5,48);
7
8
9  create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10 insert into boats values(98,"island","blue");
11 insert into boats values(99,"marine","green");
12 insert into boats values(100,"speed","red");
13 insert into boats values(101,"wind","white");
14
15
16 create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17 insert into  reserves values(22,98,"monday");
18 insert into  reserves values(23,100,"wednesday");
19 insert into  reserves values(22,99,"friday");
20 insert into  reserves values(24,101,"sunday");
21 insert into  reserves values(23,101,"wednesday");
22 insert into  reserves values(22,100,"friday");
23 insert into  reserves values(22,101,"sunday");
24 select S.sname,S.age from sailors S where S.age =(select max(S2.age)from sailors S2);
25
```
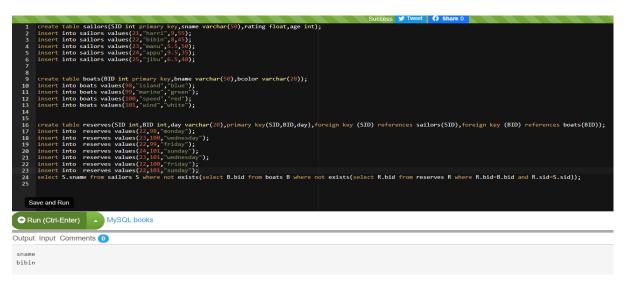
Run (Ctrl-Enter) MySQL books

Output Input Comments 0

```
sname   age
harri   55
```

6.Find the name of sailor who are older than the oldest sailor with rating of 10

```
1  create table sailors(SID int primary key,sname varchar(50),rating float,age int);
2  insert into sailors values(21,"harri",9,55);
3  insert into sailors values(22,"bibin",8,45);
4  insert into sailors values(23,"manu",5.5,50);
5  insert into sailors values(24,"appu",10,35);
6  insert into sailors values(25,"jibu",6.5,48);
7
8
9  create table boats(BID int primary key,bname varchar(50),bcolor varchar(20));
10 insert into boats values(98,"island","blue");
11 insert into boats values(99,"marine","green");
12 insert into boats values(100,"speed","red");
13 insert into boats values(101,"wind","white");
14
15
16 create table reserves(SID int,BID int,day varchar(20),primary key(SID,BID,day),foreign key (SID) references sailors(SID),foreign key (BID) references boats(BID));
17 insert into  reserves values(22,98,"monday");
18 insert into  reserves values(23,100,"wednesday");
19 insert into  reserves values(22,99,"friday");
20 insert into  reserves values(24,101,"sunday");
21 insert into  reserves values(23,101,"wednesday");
22 insert into  reserves values(22,100,"friday");
23 insert into  reserves values(22,101,"sunday");
24 select S.sname from sailors S where S.age >(select max(S2.age)from sailors S2 where S2.rating=10);
25
```
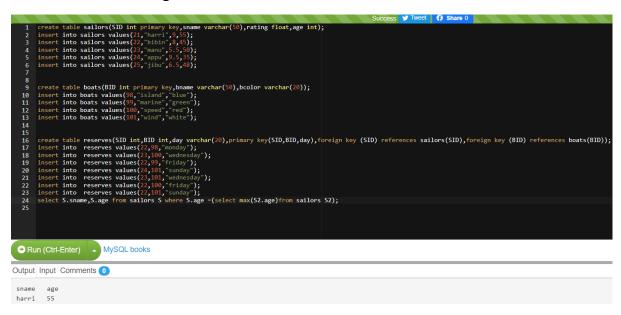
Save and Run

Run (Ctrl-Enter) MySQL books

Output Input Comments 0

```
sname
harri
bibin
manu
jibu
```