

**NAME : ANURAG SAHAY**

**ENRL : 2020CSB092**

1.

Creating table sailors

```
mysql> CREATE TABLE sailors( s_id int PRIMARY KEY, s_name char(30), rating int(2), age int(3));
Query OK, 0 rows affected (0.00 sec)

mysql> DESC sailors;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| s_id  | int(11)| NO   | PRI | NULL    |       |
| s_name| char(30)| YES  |     | NULL    |       |
| rating| int(2) | YES  |     | NULL    |       |
| age   | int(3) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

Inserting values in sailors table

```
mysql> INSERT INTO sailors VALUES(124,"kaustubh",3,20);
Query OK, 1 row affected (0.00 sec)
```

Sailors table after inserting values

```
mysql> SELECT * FROM sailors;
+-----+-----+-----+-----+
| s_id | s_name  | rating | age |
+-----+-----+-----+-----+
| 123  | anurag  | 5      | 18  |
| 124  | kaustubh| 3      | 20  |
| 125  | raunak  | 4      | 20  |
| 126  | tarun   | 4      | 40  |
| 127  | ahmad   | 2      | 65  |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

## Creating table boats

```
mysql> CREATE TABLE boats(  
-> b_id int(6) PRIMARY KEY,  
-> b_name char(30),  
-> color char(20));  
Query OK, 0 rows affected (0.01 sec)  
  
mysql> DESC boats;  
+-----+-----+-----+-----+-----+-----+  
| Field | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| b_id  | int(6)    | NO   | PRI | NULL    |      |  
| b_name | char(30)  | YES  |     | NULL    |      |  
| color | char(20)  | YES  |     | NULL    |      |  
+-----+-----+-----+-----+-----+-----+  
3 rows in set (0.00 sec)
```

## Inserting values in boats table

```
mysql> INSERT INTO boats VALUES(100,"speedboat","blue");  
Query OK, 1 row affected (0.01 sec)
```

## Boats table after inserting values

```
mysql> SELECT * FROM boats;  
+-----+-----+-----+  
| b_id | b_name      | color |  
+-----+-----+-----+  
| 100  | speedboat   | blue  |  
| 101  | pedalboat   | brown |  
| 102  | speedboat2  | green |  
| 103  | pedalboat2  | red   |  
+-----+-----+-----+  
4 rows in set (0.00 sec)
```

Creating table reserves

```
mysql> CREATE TABLE reserves(  
    -> s_id int REFERENCES sailors(s_id),  
    -> b_id int REFERENCES boats(b_id),  
    -> day char(10),  
    -> PRIMARY KEY (s_id,b_id));  
Query OK, 0 rows affected (0.01 sec)
```

Inserting values in table reserves

```
mysql> INSERT INTO reserves VALUES(123,101,"MONDAY");  
Query OK, 1 row affected (0.00 sec)
```

Reserves table after inserting values

```
mysql> SELECT * FROM reserves;  
+-----+-----+-----+  
| s_id | b_id | day      |  
+-----+-----+-----+  
| 123  | 101  | MONDAY   |  
| 126  | 100  | MONDAY   |  
| 126  | 101  | WEDNESDAY |  
| 127  | 103  | TUESDAY  |  
+-----+-----+-----+  
4 rows in set (0.00 sec)
```

2.

a)

```
mysql> SELECT color FROM sailors,boats,reserves
-> WHERE sailors.s_id=reserves.s_id
-> AND reserves.b_id=boats.b_id
-> AND s_name="tarun";
+-----+
| color |
+-----+
| blue  |
| brown |
+-----+
2 rows in set (0.00 sec)
```

b)

```
mysql> SELECT sailors.s_id,s_name FROM sailors,reserves
-> WHERE sailors.s_id=reserves.s_id
-> AND day="MONDAY";
+-----+-----+
| s_id | s_name |
+-----+-----+
| 123  | anurag |
| 126  | tarun  |
+-----+-----+
2 rows in set (0.00 sec)
```

c)

```
mysql> SELECT b_id,b_name FROM boats
-> WHERE color= "red" OR color= "green";
+-----+-----+
| b_id | b_name   |
+-----+-----+
| 102  | speedboat2 |
| 103  | pedalboat2 |
+-----+-----+
2 rows in set (0.00 sec)
```

d)

```
mysql> DELETE FROM sailors WHERE age>60;  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM sailors;
```

```
+-----+-----+-----+-----+  
| s_id | s_name  | rating | age  |  
+-----+-----+-----+-----+  
| 123  | anurag  | 5      | 18   |  
| 124  | kaustubh | 3      | 20   |  
| 125  | raunak  | 4      | 20   |  
| 126  | tarun   | 4      | 40   |  
+-----+-----+-----+-----+  
4 rows in set (0.00 sec)
```