OUTPUTS

1.

sname
Dustin
Lubber
Horatio

2.

sname
Brutus
Andy
Rusty
Zorba
Art
Bob

3.

sname
Dustin
Lubber
Horatio

4.

sname
Lubber
Andy
Rusty
Zorba
Horatio

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LAB - 4

★ AIM

Based on the database including Sailors, Reserves and Boats relations, answer the following queries. (Table drawn in Lab 3)

1. A nested query showing the name of sailors having boat number 103.

```
select s.sname from sailors as s
where s.sid in (select r.sid from reserves as r
where r.bid = 103);
```

2. A nested query showing the name of sailors who do not have a red boat.

```
select s.sname from sailors as s
where s.sid not in (select r.sid from reserves as r
where r.bid not in (select b.bid from boats as b
where b.color = 'red'));
```

3. A correlated query showing the name of sailors having boat number 103.

```
select s.sname from sailors as s
where exists (select * from reserves as r
where r.sid = s.sid and r.bid = 103);
```

4. Sailors having more rating than Horatio (any).

```
select s.sname from sailors as s
where s.rating > any (select s2.rating from sailors s2
```

Teacher's Signature

5.

Sname
Rusty
Zorba

6.

Sname
Rusty
Zorba

7.

Sname
Dustin
Lubber

8.

Sname
Dustin

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```
where s2.sname = 'Horatio');
```

5. Sailors having more rating than Horatio (both).

```
select s.sname from sailors s
where s.rating > all (select s2.rating from sailors
s2 where s2.name = 'Horatio');
```

6. Sailor having the highest rating.

```
select s.sname from sailors as s
where s.rating >= all (select s2.rating from sailors
s2);
```

7. Sailors having both red and green boats.

```
select distinct s1.sname from sailors as s1,
reserves r1, boats b1
where s1.sid = r1.sid and r1.bid = b1.bid and
b1.color = 'red' and s1.sid in
(select s2.sid from sailors s2, reserves r2,
boats b2
where s2.sid = r2.sid and r2.bid = b2.bid
and b2.color = 'green');
```

8. Sailors having all the boats.

```
select s.sname from sailors s
where not exists ((select b.bid from boats as
b) except (select r.bid from reserves r
where r.sid = s.sid));
```

Teacher's Signature _____

9.

avg (age)
37.1000

10.

avg (age)
25.5000

11.

sname	age
Bob	64

12.

No_of_sailors
10

13.

sname
Dustin
Lubber
Bob

14.

rating	min (s.age)
7	35
1	33
8	26
10	16
9	35
3	26

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9. Average age of sailors.
```
select avg(age) from sailors;
```

10. Average age of sailors having their rating 10.
```
select avg(age) from sailors s
where s.rating = 10;
```

11. Name of the oldest sailor.
```
select s.sname, s.age from sailors s
where s.age = (select max(s2.age)
from sailors s2);
```

12. Total number of sailors.
```
select count(s.sid) as No_of_sailors from
sailors s;
```

13. Sailors older than the oldest sailor who has rating 10.
```
select s.sname from sailors s
where s.age > (select max(s2.age) from
sailors s2 where s2.rating = 10);
```

14. Youngest sailor for each rating
```
select s.rating, min(s.age) from sailors s
group by s.rating;
```

Teacher's Signature

OUTPUTS

1.

fname
James
Jennifer

2.

fname
Jennifer

3.

dname	avg_salary
Headquarters	55000.0000

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Expt. No. 5

LAB - 5

* AIM

Based on the 'company' database (Lab 2), answer the following queries.

1. Using a subquery, list the name of the employees paid more than 'Franklin' from EMPLOYEE.

```
select e.fname from employee e
where e.salary > ( select e.salary from employee e
where e.fname = 'Franklin');
```

2. Name of the employee who has the second highest salary.

```
select e.fname from employee e
where e.salary < (select max(e.salary) from
employee e)
order by e.salary desc
limit 1;
```

3. Select the department with the highest average salary.

```
select d.dname, avg(e.salary) as avg_salary
from employee e
join department d on e.dno = d.dnumber
group by dno
order by avg_salary desc
limit 1;
```

Teacher's Signature _____

4.

fname
Ahmad
Jennifer
Alicia

5.

fname
John
Franklin
Jennifer

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4. Using the nested query, select any employee who works in location Stafford.

```
select e.fname from employee e
where e.dno = (select d.dnumber from
dept_locations d
where d.dlocation = 'Stafford');
```

5. Use EXIST to find employees who have at least one dependent.

```
select e.fname from employee e
where exists (select d.dependent_name from
dependent d
where d.essn = e.ssn);
```

Teacher's Signature