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| Programme | : | **B.Tech** | Semester | : | **Winter 19 - 20** |
| Course | : | **Database Management Systems** | Code | : | **CSE2004** |
| Faculty | : | **Dr.Bhuvaneswari A&Dr.Ayesha Sheik** | Slot | : | **L27 + L28** |

**Registration No.: - 19BCE1603**

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Ex. No. 4

20.12.2019

**SQL –Set Operations and Subqueries**

**PART A**

**Create two tables with the following details**

**Customer\_Fixed\_Deposit(cust\_ID,Cust\_name,Fixed\_Deposit\_Amount)**

**Customer\_loan(cust\_ID, Cust\_name, Loan\_ Amount)**

Write SQL queries for the following

1. Find all customers who have either having Fixed Deposit (FD) or loan or both

2. List all customers who have both Fixed Deposit and Loan using set operation.

3. List all customers who have both Fixed Deposit and Loan using subquery.

4. Get all Customers who have not taken a Loan using set operation.

5. Get all Customers who have not taken a Loan using subquery.

6. Find the names of customers whose FD amount is greater than the FD of the customernamed ‘Risav’.

7. Find the number of customers whose FD amount is greater than the average

of all FDamounts.

8. Find the customers those who have FD of less than Rs. 50000 and a loan amount of Rs.10000 or above.

9. Find the names of the customers who have taken the maximum loan amount.

10. Find the number of customers who have both Fixed Deposit and Loan.

create table customer\_fixed\_deposit(

cust\_ID number(3) primary key,

cust\_name varchar2(30),

fixed\_deposit\_amount number(15));

create table customer\_loan(

cust\_ID number(3) primary key,

cust\_name varchar2(30),

loan\_amount number(15));

insert into customer\_fixed\_deposit values(101,'suresh',10000);

insert into customer\_fixed\_deposit values(102,'ganesh',90000);

insert into customer\_fixed\_deposit values(103,'ghanpat',7000);

insert into customer\_fixed\_deposit values(104,'mohit',70000);

insert into customer\_fixed\_deposit values(105,'risav',67000);

insert into customer\_loan values(102,'ganesh',10000);

insert into customer\_loan values(105,'risav',8000);

insert into customer\_loan values(106,'rajesh',80000);

insert into customer\_loan values(107,'sakesh',6300);

insert into customer\_loan values(108,'magesh',3900);

1)select \* from customer\_fixed\_deposit union select \* from customer\_loan;

2)select \* from customer\_fixed\_deposit intersect select \* from customer\_loan;

CUST\_ID CUST\_NAME FIXED\_DEPOSIT\_AMOUNT

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102 ganesh 90000

105 risav 67000

3)select \* from custoner\_fixed\_deposit where cust\_id in (select cust\_id from customer\_loan);

CUST\_ID CUST\_NAME FIXED\_DEPOSIT\_AMOUNT

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102 ganesh 90000

105 risav 67000

4)select \* from custoner\_fixed\_deposit minus select \* from customer\_loan;

CUST\_ID CUST\_NAME FIXED\_DEPOSIT\_AMOUNT

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101 suresh 10000

103 ghanpat 7000

104 mohit 70000

5)select \* from custoner\_fixed\_deposit where cust\_id not in (select cust\_id from customer\_loan);

CUST\_ID CUST\_NAME FIXED\_DEPOSIT\_AMOUNT

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101 suresh 10000

103 ghanpat 7000

104 mohit 70000

6) SQL> select cust\_name from customer\_fixed\_deposit where fixed\_deposit\_amount>(se

lect fixed\_deposit\_amount from customer\_fixed\_deposit where cust\_name='risav');

CUST\_NAME

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ganesh

mohit

7) SQL> select count(\*) from customer\_fixed\_deposit where fixed\_deposit\_amount>(sel

ect avg(fixed\_deposit\_amount) from customer\_fixed\_deposit);

COUNT(\*)

3

8) SQL> select \* from customer\_fixed\_deposit where fixed\_deposit\_amount<50000 union

select \* from customer\_loan where loan\_amount>10000;

CUST\_ID CUST\_NAME FIXED\_DEPOSIT\_AMOUNT

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101 suresh 10000

103 ghanpat 7000

106 rajesh 80000

9) SQL> select cust\_name from customer\_loan where loan\_amount=(select max(loan\_amou

nt) from customer\_loan);

CUST\_NAME

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rajesh

10) select \* from customer\_fixed\_deposit intersect select \* from customer\_loan;

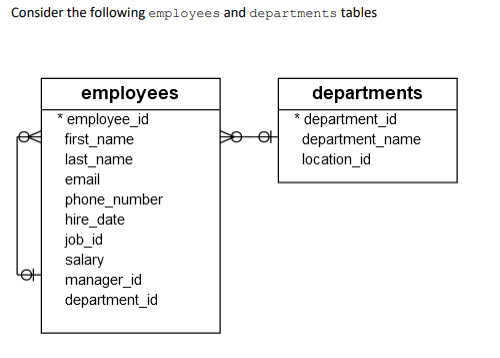
CUST\_ID CUST\_NAME FIXED\_DEPOSIT\_AMOUNT

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102 ganesh 90000

105 risav 67000

**PART B**



1. Find all employees that belong to the location 1700 by using the department id
2. Find the employees who have the highest salary:
3. Find all employees who salaries are greater than the average salary of all employees:
4. Find all employees whose salaries are greater than the lowest salary of every department:
5. Finds the salaries of all employees, their average salary, and the difference between the salary ofeach employee and the average salary.

create table employees(

employee\_id number primary key,

first\_name varchar2(50),

last\_name varchar2(30),

email varchar2(20),

phone\_number number,

hire\_date date,

job\_id number(5),

salary number(5),

manager\_id number(5),

department\_id number(5));

create table departments(

department\_id number(7) primary key,

department\_name varchar2(50),

location\_id number(7));

insert into employees values(100,'Wilson','Vidyut','wilson@gmail.com',8285400986,'20-DEC-2019',1000,50000,5000,9000);

insert into employees values(101,'Rishank','Pratik','pratik@gmail.com',8265485986,'10-JAN-2019',1001,75000,5001,9001);

insert into employees values(102,'Jananya','Sivakumar','jananya@gmail.com',98744488562,'22-MAY-2019',1002,65000,5002,9002);

insert into employees values(103,'Aniket','Saraf','aniket@gmail.com',6985488562,'12-JUN-2018',1003,79000,5003,9003);

insert into employees values(104,'Aditya','Mishra','aditya@gmail.com',6956528562,'19-JUL-2015',1004,95000,5004,9004);

insert into departments values(9001,'Development',1700);

insert into departments values(9002,'Computing',1800);

insert into departments values(9003,'Coding',1700);

insert into departments values(9004,'HR',1800);

insert into departments values(9000,'logistics',1500);

1)select \* from employees where department\_id=(select department\_id from departments where location\_id=1700);

employee\_id first\_name last\_name email phone\_number hire\_date job\_id salary manager\_id department\_id

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101 Rishank Pratik pratik@gmail.com 8265485986 10-JAN-2019 1001 75000 5001 9001

103 Aniket Saraf aniket@gmail.com 6985488562 12-JUN-2018 1003 79000 5003 9003

2) select \* from employees where salary=(select max(salary) from employees);

employee\_id first\_name last\_name email phone\_number hire\_date job\_id salary manager\_id department\_id

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104 Aditya Mishra aditya@gmail.com 6956528562 19-JUL-2015 1004 95000 5004 9004

3)select \* from employees where salary>(select avg(salary) from employees);

employee\_id first\_name last\_name email phone\_number hire\_date job\_id salary manager\_id department\_id

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101 Rishank Pratik pratik@gmail.com 8265485986 10-JAN-2019 1001 75000 5001 9001

103 Aniket Saraf aniket@gmail.com 6985488562 12-JUN-2018 1003 79000 5003 9003

104 Aditya Mishra aditya@gmail.com 6956528562 19-JUL-2015 1004 95000 5004 9004

4)select \* from employees where salary>(select min(salary) from employees group by department\_id);

employee\_id first\_name last\_name email phone\_number hire\_date job\_id salary manager\_id department\_id

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101 Rishank Pratik pratik@gmail.com 8265485986 10-JAN-2019 1001 75000 5001 9001

102 Jananya Sivakumar jananya@gmail.com 9874448856 22-MAY-2019 1002 65000 5002 9002

103 Aniket Saraf aniket@gmail.com 6985488562 12-JUN-2018 1003 79000 5003 9003

104 Aditya Mishra aditya@gmail.com 6956528562 19-JUL-2015 1004 95000 5004 9004

5)select salary from employees;

salary

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50000

75000

65000

79000

95000

select avg(salary) from employees;

avg(salary)

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72800

select salary-avg(salary) from employees;

salary-avg(salary)

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-22800

2200

-7800

6200

22200