① 10 Examples of subquery

Ex. Employee table

Emp-id	Emp-name	Job-name	manager-id	Salary	hire-date	commission	dep-id
150	Sarah	consultant	1	70000	05/04/2019	0.00	100
242	Raakhi	Programmer	2	50000	11/05/2020	0.00	200
315	Satya	Developer	3	40000	14/03/2012	0.00	300
420	Tara	Analyst	4	30000	08/12/2020	0.00	400
530	mani	Tester	5	35000	19/08/2021	0.00	500

① Query to display name for those employees who gets more salary than the employee whose id is 530.

```
Select emp-name from Employee whose salary >
        (select salary from employee
         where Emp-id = 530);
```

O/P:

Emp-name
Sarah
Rakhi
Satya

2) Find all Employees whose salaries are greater than the average salary of all employees.

```
Select Emp-id, Emp-name, Salary from Employee
where Salary > (select Avg(salary) from
                Employee);
```

① 10 Examples of subquery

Ex: Employee table

Emp-id	Emp-name	Job-name	manager-id	Salary	hire-date	commission	dep-id
150	Sarah	consultant	1	70000	05/04/2019	0.00	100
242	Raakhi	Programmer	2	50000	11/05/2020	0.00	200
315	Satya	Developer	3	40000	14/03/2012	0.00	300
420	Tara	Analyst	4	30000	08/12/2020	0.00	400
530	mani	Tester	5	35000	19/08/2021	0.00	500

① Query to display name for those employees who gets more salary than the employee whose id is 530.

```
Select emp-name from Employee whose salary >
    (select salary from employee
     where Emp-id = 530);
```

O/P:-

Emp-name
Sarah
Raakhi
Satya

2) Find all Employees whose salaries are greater than the average salary of all employees.

```
Select Emp-id, Emp-name, Salary from Employee
where salary > (select Avg(salary) from
                Employee);
```

O/P

Emp-id	Emp-name	salary
150	sarah	7000
242	Raakhi	50000

3) Find all employee id, names, Salary whose Job, name Contains secund letters as 'e'

Select Emp-id Emp-name, salary from employee where salary IN(select salary from employee whose Job-name Like '_e%.');

O/P:

Emp-id	Empname	salary
315	satya	40000
530	mani	38000

4) Find department id & salary for all employees between dept-id b/w 200 & 400

Select dep-id, salary from employee where dep-id (select dep-id from employee whose dep-id Between 200 and 400);

emp_name

O/P

emp-name	salary	dep-id
Raakhi	50000	200
Satya	40000	300
Tara	30000	4000

5) find a query for each employee along with avera salary for all employees.

```
Select emp-id, emp-name, salary
(select avg(salary) from employee) as
avg-salary from employee;
```

O/P:-

emp-id	emp-name	Salary	avg-salary
150	sarah	70000	42000
242	Raakhi	50000	43000
315	satya	40000	43000
420	Tara	30000	43000
520	mani	35000	43000

② Employee table as emp

E-id Emp

E_id	E_name	Dept	salary
1	Ram	HR	10000
2	Amrit	MRKT	20000
3	Ravi	Ravi	30000
4	Nithin	MRKT	40000
5	Varun	IT	50000

1) write a sql query to display maximum salary from emp table

Select E_name from Employee where salary =(select max(salary) from emp);

O/P

E_name
Varun

2) write a SQL query to display second highest salary from Emp-table?

Select max (salary) from emp.

Select max (salary) from emp where salary < > (select max (salary) from emp);

3) ~~WAsql~~ write a sql query to display emp-name who is taking second highest salary?

```
Select emp-name from emp where salary =
    (select max(salary) from emp where salary
    <> (select max(salary) from emp));
```

o/p

emp-name
rima

4) write a query to display all the ~~employee~~dept ~~name~~names along with no. of employee working?

```
Select dept, count(*) from emp group by dept;
```

o/p:

dept	count(*)
hr	2
mkrt	2
IT	1

5) write a query to display all the dept-names where no-of emp are less than 2;

```
Select dept from emp group by dept having
    count(*) <2;
```

o/p

dept
IT

SQL JOINS

1st Example of Joins

Customer table

cid	cname	camail
1	Vinod	Vindd@gmail.com
2	bahadar	bahadur@gmail.com
3	thapa	thapa@gmail.com
5	thapatechnical	thapat@gmail.com

Orders table

oid	orderdate	oamount	cid
1	2019-05-05	55	1
2	2019-08-06	85	2
3	2019-08-05	155	1
4	2019-05-12	95	3

1) INNER JOIN :-

```
Select * from customer JOIN orders
ON customer.cid = orders.cid;
order by orderdate;
```

cid	cname	camail	oid	orderdate	oamount	cid
1	vinod	vinod@gmail.com	1	2019-05-05	55	1
2	bahadur	bahadur@gmail.com	2	2019-08-06	85	2
1	vinod	vinod@gmail.com	3	2019-08-05	155	1
3	thapa	thapa@gmail.com	4	2019-05-12	95	3

LEFT JOIN

```
Select customer.cid, cname, oamount
from customers
LEFT JOIN orders
ON customer.cid = orders.cid;
```

O/P:

cid	cname	oamount
1	Vinod	55
2	bahadur	85
1	Vinod	155
3	thapa	95
5	thapate	NULL

RIGHT JOIN:

```
Select customer.cid, cname, oamount
from customer
RIGHT JOIN orders
ON customer.cid = orders.cid;
```

O/P:

Cid	cname	oamount
1	Vinod	55
2	Bahadur	85
1	Vinod	155
3	thapa	95

2nd example of joins

1) Customer table

ID	Name	Age	Addres	Salary
1	Adil	30	london	5000
2	Ali	32	Newyork	2000
3	Bano	25	Sydney	6000
4	Aqsa	45	Paris	8000

Order table

Oid	Date	customerID	Amount
1	15-08-2009	3	3000
2	27-11-2010	3	7000
3	31-01-2012	2	6000
4	15-03-2016	4	9000

1) INNER JOIN

```
Select ID, Name, amount, Date
from customers
INNER JOIN ORDERS ON
customer.id = order.customerID;
```

O/P

ID	Name	Age	Addres	Salary	ID	Name	Amount	Date
1	Adil	30	London	5000	1	Bano	3000	15-08-2009
2	Ali	32	Newyork	2000	2	Bano	7000	27-11-2010
3	Bano	25	Sydney	6000	3	Ali	6000	31-01-2012
4	Aqsa	45	Paris	8000	4	Aqsa	9000	15-03-2016

2) RIGHT JOIN

```
Select ID, Name, amount, Date from customer
RIGHT JOIN order on
customer.id = order.customerID;
```

ID	Name	Amount	Date
1	Bano	3000	15-08-2009
2	Bano	7000	27-11-2010
3	Ali	6000	31-01-2012
4	Aqsa	9000	15-03-2016
5	NULL	2000	21-10-2015.

3) LEFT JOIN

```
Select ID ,NAME, Amount, date
from customer
LEFT JOIN order ON
customer.ID = order.customer_ID;
```

O/P.

ID	Name	Amount	Date
1	Adil	NULL	NULL
2	Bano	3000	15-08-2009
3	Bano	7000	27-11-2010
4	Ali	6000	31-01-2012
5	Aqsa	9000	15-03-2016

FULL JOIN :-

```
Select ID, name, amount, date from
  customer
full join order ON
  customer.id = orders.customerID;
```

ID	Name	Amount	Date
1	Adil	NULL	NULL
2	Bano	3000	15-08-2019
3	Bano	7000	27-11-2010
4	Ali	6000	31-01-2012
5	Aqsa	9000	15-03-2016
6	NULL	2000	21-10-2018.