

```
/* Que 1- Find the products that have a price higher than the average price of all products */
```

```
select * from
    (select *,
        avg(price) over() as avg_price
    from sales.products)t
where price>avg_price;
```

```
/* Que 2- Rank Customers based on their total amount of sales */
```

```
select *,
rank() over(order by total_sales desc) AS CUSTOMER_RANKING
FROM
(select customerid,sum(sales) as Total_sales from sales.orders
group by CustomerID)T;
```

```
/* Que 3- Show the product IDs, names, prices and total number of orders */
```

```
SELECT PRODUCTID,
PRODUCT,
PRICE,
    (SELECT COUNT(ORDERID) FROM SALES.ORDERS) AS TOTAL_ORDERS
FROM SALES.PRODUCTS;
```

```
/* Que 4- Show all customer details and find the total orders for each customer */
```

```
SELECT C.*, T.ORDERS_BY_CUSTOMERS FROM SALES.Customers AS C
LEFT JOIN (SELECT CUSTOMERID,COUNT(*) AS ORDERS_BY_CUSTOMERS FROM SALES.ORDERS
GROUP BY CUSTOMERID) AS T
ON T.CustomerID = C.CustomerID;
```

```
/* Que 5- Find the products that have a price higher than the average price of all products */
```

```
select *,(select avg(price) from sales.Products) AS AVG_PRICE
from sales.Products
where price >
(select avg(price) from sales.Products);
```

```
/* Que 6- Show the details of orders made by customers in Germany */
```

```
select * from sales.orders
where CustomerID in (
```

```
select CustomerID from sales.Customers
where Country = 'Germany');
```

/* Que 7- Show the details of orders for customers who are not from Germany */

```
select * from sales.orders
where CustomerID in (
select CustomerID from sales.Customers
where Country != 'Germany');
--OR
select * from sales.orders
where CustomerID not in (
select CustomerID from sales.Customers
where Country = 'Germany');
```

/* Que 8- Find female employees whose salaries are greater than the salaries of any male employees */

```
select * from sales.Employees
where gender='F'
and salary > Any(select salary from sales.Employees
where gender = 'M');
```

/* Que 9- Find female employees whose salaries are greater than the salaries of all male employees */

```
select * from sales.Employees where gender = 'F'
and salary > all(select salary from sales.Employees where gender = 'M');
```

--note no female employee who has salary greater than all male employee

-- Correlated Subquery

/* Que 10 - Show all customer details and find the total orders for each customer */

```
select *,
(select count(*) from sales.orders as o where o.CustomerID=c.CustomerID) as
    Total_order
from sales.Customers as c;
```

/* Que 11- Show the details of orders for customers who are from Germany with the help of exists*/

```
select * from sales.orders as o
where exists (select 1 from sales.Customers as c
              in subquery always put 1
where country = 'Germany' and c.customerid=o.customerid) -- ?
```

/* Que 12- Show the details of orders for customers who are not from Germany with the help of exists*/

```
select * from sales.Orders as o
where not exists (select 1 from sales.customers as c where country='germany'
and c.customerid = o.customerid);
```