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----- DAY 1 -----
use Employee
select*from empdata order by eeid
--Q.1 query to insert new record into the empdata table
insert into empdata values
    ('E00001','sandeep','manager','IT','Robotics','Male','Asian',
'22','2006-07-05','220000','0.1','India','jaipur',GETDATE())
--Q2.
--2.1update column into empdata table
select*from empdata order by eeid
update empdata
set EEID='E00002'
where Exit_date = 'Jul 25 2023 1:06AM'

--2.2 update name use eeid
update empdata
set fullname='raju'
where eeid = 'E00002'
--2.3 update job title
update empdata
set job_title='Sr. Maganger'
where fullname='sandeep'
-- Q3. delete record into table
select*from empdata order by eeid
delete from empdata where hire_date<='2004-05-01'

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----- DAY 2 -----
-----filtering ans shorting data-----

use Employee
select*from empdata order by eeid
--Q1 retrive all the column where department is it and age <49
select*from empdata where Department = 'IT' and Age<49 order by eeid
--Q2 alphabetic order name
select*from empdata order by fullname
--Q3. USE Supply chain data
use supply_chain
select * from Car_SupplyChain
-- create a column then fill the column value by using other column value
alter table car_supplychain add order_yr varchar(10) null;
update car_supplychain
set order_yr = year(orderdate);
-- Q3. total quantity sale by order yr (by using order_yr colun)

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select order_yr,sum(Quantity) as total_qnt from Car_SupplyChain
group by order_yr order by total_qnt
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----- DAY 3 -----
----- JOIN Command -----
use Employee
select *from Data1
select*from Data2
--Q1. Write a query to retrieve full name, age and department from data1,
--    data2 table to joining them?
select d1.fullname,d1.age,d2.department from Data1 as d1 inner join
Data2 as d2 on(d1.EEID=d2.EEID)
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--Q2. Write a query to retrieve the employee full name and salary from
--    data1 and data2 table and only include where salary is >1000000?
select d1.fullname,d2.Annual_Salary from Data1 as d1 inner join
Data2 as d2 on(d1.EEID=d2.EEID)
where d2.Annual_Salary>200000
```

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----- DAY 4 -----
----- Agregating Data -----
use sales
select*from sales_data_sample
--Q1. Write a SQL query to retrieve the avg price of product in each
--    category from the 'Product' table?
select productline,PRODUCTCODE,avg(PRICEEACH) avg_price from sales_data_sample
group by productline,PRODUCTCODE order by avg_price

--Q2. Write a query to retrieve max salary of each department from employee data?
use Employee
select department, max(Annual_Salary) max_sal from empdata
group by Department order by max_sal

--Q3. Write a query to retrieve the total revanue genrated by each customer
--    from sales data?
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use sales
select CUSTOMERNAME, sum(SALES) total_revanue from sales_data_sample
group by CUSTOMERNAME order by total_revanue desc

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----- DAY 5 -----
----- Data Manipulation -----

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--Q1. Write a sql query to update the quantity column of the product
-- table to 20 for all the product with a price greater then 90?

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use sales
select * from sales_data_updated

update sales_data_updated
set QUANTITYORDERED = 20
where PRICEEACH > 90
select ORDERNUMBER, QUANTITYORDERED, PRICEEACH from sales_data_updated
order by ordernumber

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--Q2. write a query to delete all the record of the customer where last login
-- date is order then 1 year?

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use sales

delete from sales_data_updated
where CUSTOMERNAME not in (select distinct(CUSTOMERNAME) from sales_data_updated
where year_id=2005)

```

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--Q3. write a query to insert all new record into the temp_employee table selecting ➤

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-- data from employee table?

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--ANS. First i create 2 temprarry table then save all records from employee table ➤
to

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---- this tebrarry table, then i devided records into two part using hire year.

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-- Now i insert data into temp1 table from temp2 table

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use Employee
select * into #temp_emptable1 from empdata
select * into #temp_emptable2 from empdata

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delete from #temp_emptable1 where year(Hire_Date) > 2019
delete from #temp_emptable2 where year(Hire_Date) <= 2019

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insert into #temp_emptable1 select * from #temp_emptable2 where year(Hire_Date) ➤

```

<=2020

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--Q4. Write a query to update the discount column of the orders table by increasing it by
--      5% for all order placed before a specific date?
use employee
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select sales, quantity, discount, profit, [Ship Date] as ship_date from odr
where year([Ship Date]) < 2016
```

```
select * from odr
```

```
update odr
set Discount = Discount + 0.05
where year([Ship Date]) < 2016
```

```
select sales, quantity, discount, profit, [Ship Date] as ship_date from odr
where year([Ship Date]) < 2016
```

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----- DAY 6 -----
----- Advance filtering and shorting -----
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--Q1. Write a sql query to retrieve all the customers whose name start with 'J' and
--      city contain "York"?
use Employee
select * from empdata where fullname like 'J%' and city like '%Miami%'
```

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--Q2. Write a sql query to retrieve all the product with a price either above
--      80 and below 85
use sales
select ORDERNUMBER, PRICEEACH from sales_data_sample where
PRICEEACH between 80 and 85
```

```
--Q3. Write a sql query to retrieve all the employee whose were hire in
--      btween specific date?
use Employee
select fullname, convert(date, Hire_Date) as hir_date from empdata
where convert(date, Hire_Date) between '2014-01-01' and '2017-01-01'
```

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--Q4. Write a sql query to retrieve all the customer name who
--      do not have phone number in the dataset
use sales
select * from sales_data_sample where PHONE is null
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-----          DAY 7          -----
-----  Working with function  -----

--Q1. Write a sql query to retrieve all the length of the product name
--      from the product table?
use supply_chain
select SupplierID,CarModel,len(CarModel) as length from Car_SupplyChain

--Q2. query to retrieve current date and time
select GETDATE()

--Q3. Write a query to retrieve uppercase name of the employee from employee table
use Employee
select UPPER(fullname) from empdata

-- imp** Q4. Write a query to retrieve avg price of the product after applying a
--      10% discount from the Product table?
use supply_chain
select CarPrice as old_price, CarPrice*0.90 after_10_discount from Car_SupplyChain

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-----          DAY 8          -----
-----  Subqueries            -----

--Q1. write a sql query to retrieve all the products with a price higher than
--      average price of all products?
use supply_chain
select CarModel, CarPrice from Car_SupplyChain where CarPrice > (select avg
    (CarPrice) from Car_SupplyChain)

--Q2. write a sql query to retrieve all the name of ll employee who have a salary
--      higher than the maximum salary of the 'IT' department?
use Employee
select fullname,Annual_Salary,Job_Title from empdata
where Annual_Salary > (select max(Annual_Salary) from empdata where Department =

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'It')

--Q3. write a query to retrieve all customer name who place a order after
--     latest order orderdate for a specific product?
use supply_chain
select CustomerName,CarModel as toyota_model from Car_SupplyChain where
OrderDate > '2019-02-13' and CarMaker = 'Toyota'

--Q4. write a sql query to retrieve all the carmaker that belong to carmaker
--     with more than 10 carmodel.
use supply_chain
with cte as
(select distinct(Carmodel) as car_mod1,CarMaker from Car_SupplyChain )

select CarMaker , count(CarMaker) as total_car_model from cte
group by CarMaker having count(CarMaker)>10
```

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-----          DAY 9          -----
-----          Views and index      -----
/*
Q1. Create a view name "high_salary_employee" that retrieves all the employee
with a salary greater then 60000 from the "employee" table?
use Employee
*/

create view high_salary_employee as
select * from empdata where Annual_Salary>50000

select * from high_salary_employee
-- Total 70 row show in this result view

--Q2. Create a view name "Order_summary" that retrieves all the total
--     order amount and the number of order for each customer from the order table?
use sales
create view Order_summary as
select CUSTOMERNAME,sum(QUANTITYORDERED) number_of_order,sum(sales) order_amount
from sales_data_sample
group by CUSTOMERNAME

select * from Order_summary order by order_amount desc
/* After run this query we find total 92 row in this view
```

there are top 3 row where highest order amount customers

Cutomername	num_of_order	order_amount
1. Euro Shopping Channel	7180	912294.110473633
2. Mini Gifts Distributors Ltd.	47761	654858.058105469
3. Australian Collectors, Co.	1432	200995.41015625

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--Q3. create an index on the "email" column of the customer table for faster searching?



use Music\_database

create index email -- Create Index

on employee(email) --- from employee table

--Q4. Create a view name "product\_inventory" that retrives the product name and the avilable quantity for each product from the "products" and "inventory" tables?



----- DAY 10 -----

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PRACTICE QUESTIONS:

1. Create a table named "orders" with columns for order ID, customer ID, and order date, where the order ID is the primary key and the customer ID references the "customers" table.

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2. Create a table named "products" with columns for product ID, name, and price, where the product ID is the primary key and the price cannot be null.

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3. Create a table named "categories" with columns for category ID and name, where the category ID is the primary key and the name must be unique.

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----- Day 11 -----

----- Modifying Tables -----

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PRACTICE QUESTIONS:

1. Rename the table "customer\_details" to "client\_details".

2. Delete the "quantity" column from the "products" table.

3. Modify the "orders" table to change the data type of the "order\_date" column to DATE. [↗](#)