**Module -1**

* **Create Database: Practice**
* **Create Table: tbl\_products:**

insert into tbl\_products values ('DVD',105.00,'LivingRoom')

insert into tbl\_products values ('Microwave',98.00,'Kitchen')

insert into tbl\_products values ('Monitor',200.00,'Office')

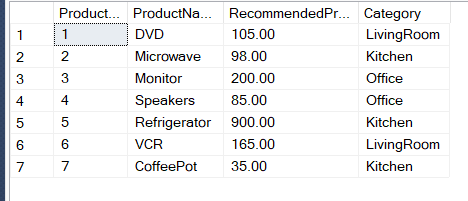
insert into tbl\_products values ('Speakers',85.00,'Office')

insert into tbl\_products values ('Refrigerator',900.00,'Kitchen')

insert into tbl\_products values ('VCR',165.00,'LivingRoom')

insert into tbl\_products values ('CoffeePot',35.00,'Kitchen')

select \* from tbl\_products



* **Create Table: tbl\_customers:**

insert into tbl\_customers values ('Chintan','Patel','Anand','GJ',388001)

insert into tbl\_customers values ('Paresh','Prajapati','Nadiad','GJ',387001)

insert into tbl\_customers values ('Pragnesh','Patel','Surat','GJ',395008)

insert into tbl\_customers values ('Nilesh','Dharsandia','Mumbai','MH',400002)

insert into tbl\_customers values ('Sonal','Patel','Mumbai','MH',400002)

insert into tbl\_customers values ('Harshal','Patel','Mogri','GJ',388345)

insert into tbl\_customers values ('Prakash','Rathod','Mogri','GJ',388345)

insert into tbl\_customers values ('Aarzoo','Dodhiya','Rajkot','GJ',360003)

insert into tbl\_customers values ('Heta','Dave','Varanasi','UP',221002)

insert into tbl\_customers values ('Nikita','Dave','Varanasi','UP',221002)

insert into tbl\_customers values ('Vaibhav','Dave','Varanasi','UP',221002)

insert into tbl\_customers values ('Paresh','Patel','Pune','MH',411001)

insert into tbl\_customers values ('Prakash','Patel','Pune','MH',411001)

insert into tbl\_customers values ('Sandhya','Patel','Hyedrabad','AP',500031)

insert into tbl\_customers values ('Divyesh','Patel','Banglore','KA',560002)

insert into tbl\_customers values ('Payal','Shah','Banglore','KA',560002)

insert into tbl\_customers values ('Priyanka','Rana','Anand','GJ',388001)

insert into tbl\_customers values ('Sanket','Dhebar','V.V.Nagar','GJ',388121)

insert into tbl\_customers values ('Puja','shah','Varanasi','UP',221002)

insert into tbl\_customers values ('Priya','shah','Varanasi','UP',221002)

select \* from tbl\_customers



* **Create Table : tbl\_sales :**

insert into tbl\_sales values (1,1,130.00,'2005-06-14')

insert into tbl\_sales values (2,2,97.00,'2005-06-19')

insert into tbl\_sales values (3,3,200.00,'2005-09-20')

insert into tbl\_sales values (4,4,80.00,'2005-03-22')

insert into tbl\_sales values (5,5,899.00,'2005-01-23')

insert into tbl\_sales values (6,6,150.00,'2005-03-24')

insert into tbl\_sales values (3,7,209.00,'2005-03-10')

insert into tbl\_sales values (4,8,90.00,'2005-08-11')

insert into tbl\_sales values (6,9,130.00,'2005-08-12')

insert into tbl\_sales values (2,14,85.00,'2005-12-13')

insert into tbl\_sales values (3,15,240.00,'2005-05-14')

insert into tbl\_sales values (1,17,87.00,'2005-07-19')

insert into tbl\_sales values (2,18,99.00,'2005-09-20')

insert into tbl\_sales values (6,19,150.00,'2005-07-22')

insert into tbl\_sales values (5,5,900.00,'2005-03-06')

insert into tbl\_sales values (4,6,86.00,'2005-04-07')

insert into tbl\_sales values (2,7,88.00,'2005-11-08')

insert into tbl\_sales values (3,8,198.00,'2005-05-09')

insert into tbl\_sales values (1,9,150.00,'2005-10-10')

insert into tbl\_sales values (6,14,99.00,'2005-05-09')

insert into tbl\_sales values (6,15,104.00,'2005-09-20')

insert into tbl\_sales values (4,14,90.00,'2005-07-22')

insert into tbl\_sales values (1,1,130.00,'2005-03-06')

insert into tbl\_sales values (2,2,102.00,'2005-04-07')

insert into tbl\_sales values (1,3,114.00,'2005-11-08')

insert into tbl\_sales values (5,4,1000.00,'2005-05-09')

insert into tbl\_sales values (5,5,1100.00,'2005-10-10')

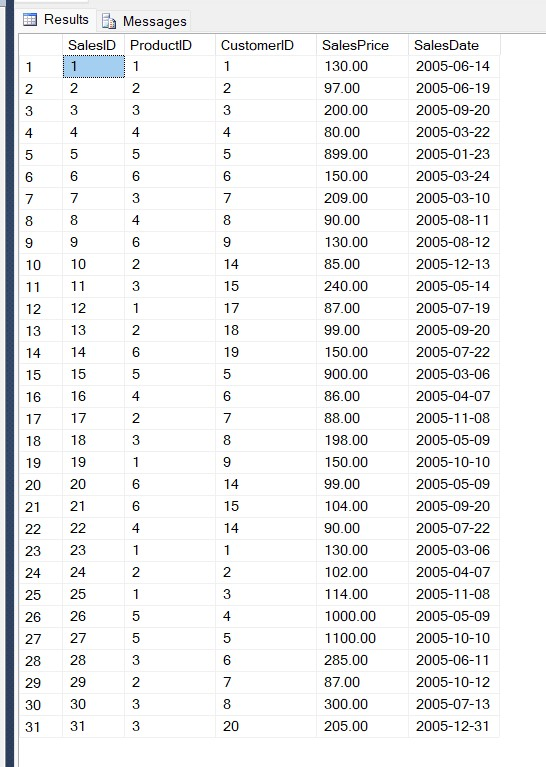
insert into tbl\_sales values (3,6,285.00,'2005-06-11')

insert into tbl\_sales values (2,7,87.00,'2005-10-12')

insert into tbl\_sales values (3,8,300.00,'2005-07-13')

insert into tbl\_sales values (3,20,205.00,'2005-12-31')

select \* from tbl\_sales



* **Queries :**

1. **Return the First Name, Last Name, Product Name, and Sale Price for all products sold in the month of October 2005.**
   * select

cust.FirstName,

cust.LastName,

prod.ProductName,

sal.SalesPrice

from

tbl\_products prod

inner join

tbl\_sales sal

on

prod.ProductID=sal.ProductID

inner join

tbl\_customers cust

on

sal.CustomerID=cust.CustomerID

where

SalesDate between '2005-10-01'and'2005-10-31'

1. **Return the CustomerID, First Name, and Last Name of those individuals in the Customer table who have made no Sales purchases.**
   * select

cust.CustomerID,

cust.FirstName,

cust.LastName

from

tbl\_customers cust

left outer join

tbl\_sales sal

on

cust.CustomerID=sal.CustomerID

where

sal.CustomerID is null

1. **Return the First Name, Last Name, Sale Price, Recommended Sale Price, and the difference between the Sale Price and Recommended Sale Price for all Sales. The difference must be returned as a positive number.**
   * select

cust.FirstName,

cust.LastName,

sal.SalesPrice,

prod.RecommendedPrice,

prod.RecommendedPrice-sal.SalesPrice as difference

from

tbl\_customers cust

inner join

tbl\_sales sal

on

cust.CustomerID=sal.CustomerID

inner join

tbl\_products prod

on

sal.ProductID=prod.ProductID

1. **Return the average Sale Price by Product Category.**
   * select

avg(sal.salesprice) as average\_of\_salesprice

from

tbl\_products prod

inner join

tbl\_sales sal

on

prod.ProductID=sal.ProductID

1. **Add the following Customer and Sale information to the database. (using store procedure)**

**FirstName: Priyanka**

**LastName: Chopra**

**City: Mumbai**

**State: MH**

**Zip: 400001**

**ProductID: 3**

**SalePrice: 205**

**SaleDate: 12/31/2005**

* + update tbl\_customers

set FirstName='Priyanka',

LastName='Chopra',

City='Mumbai',

State='MH',

Zip=400001

from tbl\_customers

inner join tbl\_sales

on tbl\_customers.CustomerID=tbl\_sales.CustomerID

where SalesID=3

update tbl\_sales

set ProductID=3 ,

SalesPrice=205 ,

SalesDate='2005-12-31'

from tbl\_customers

inner join tbl\_sales

on tbl\_customers.CustomerID=tbl\_sales.CustomerID

where SalesID=3

1. **Return the Product Category and the average Sale Price for those customers who have purchased two or more products.**
   * select prod.Category,

avg(sal.SalesPrice) as average\_salesprice

from tbl\_products prod

inner join tbl\_sales sal

on prod.ProductID=sal.ProductID

group by Category

1. **Update the Sale Price to the Recommended Sale Price of those Sales occurring between 6/10/2005 and 6/20/2005.**
   * update

tbl\_sales

set

SalesPrice = RecommendedPrice

from

tbl\_products prod

inner join

tbl\_sales sal

on

prod.ProductID=sal.ProductID

where

SalesDate between '2005-06-10'and'2005-06-20'

1. **Number of Sales by Product Category where the average Recommended Price is 10 or more dollars greater than the average Sale Price.**
   * select sal.SalesID,

avg(prod.RecommendedPrice) as recomm,

avg(sal.SalesPrice) as sales

from

tbl\_products prod

inner join

tbl\_sales sal

on

prod.ProductID=sal.ProductID

group by

SalesID

having

avg(prod.RecommendedPrice)>avg(sal.SalesPrice)

1. **Without using a declared iterative construct, return Sale Date and the running total for all sales, ordered by the Sale Date in Ascending Order.**
   * select SalesDate,

sum(SalesID) over (order by SalesDate asc) as total\_for\_all\_sales

from tbl\_sales

* **Create Database: Employee**
* **Create Table: tbl\_employee:**

insert into tbl\_employee values('Priya','1991-11-18','EEE',27500,'D1')

insert into tbl\_employee values('Sandhya','1990-06-09','SA',25500,'D5')

insert into tbl\_employee values('Prakash','1992-11-21','Accountant',29570,'D4')

insert into tbl\_employee values('Divesh','1992-08-10','Supervisor',31000,'D3')

insert into tbl\_employee values('Payal','1990-12-01','EEE',32000,'D7')

insert into tbl\_employee values('Chintan','1991-04-25','SA',20500,'D9')

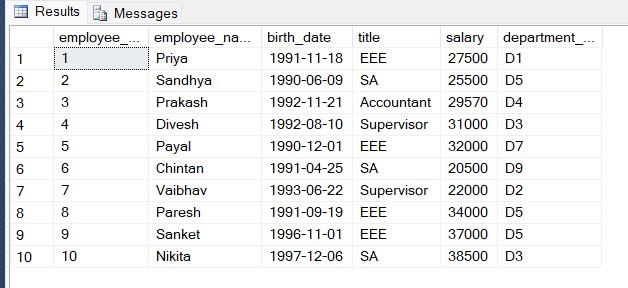
insert into tbl\_employee values('Vaibhav','1993-06-22','Supervisor',22000,'D2')

insert into tbl\_employee values('Paresh','1991-09-19','EEE',34000,'D5')

insert into tbl\_employee values('Sanket','1996-11-01','EEE',37000,'D5')

insert into tbl\_employee values('Nikita','1997-12-06','SA',38500,'D3')

select \* from tbl\_employee



* **Create Table: tbl\_proj:**

insert into tbl\_proj values('Acme Corporation','$75000','D3')

insert into tbl\_proj values('Annual Report','$100000','D1')

insert into tbl\_proj values('Aurora Bridge Retrofit','$70000','D2')

insert into tbl\_proj values('PBX Upgrade','$85000','D5')

insert into tbl\_proj values('Risk Assessment','$12000','D8')

insert into tbl\_proj values('Safety Procedures','$20000','D4')

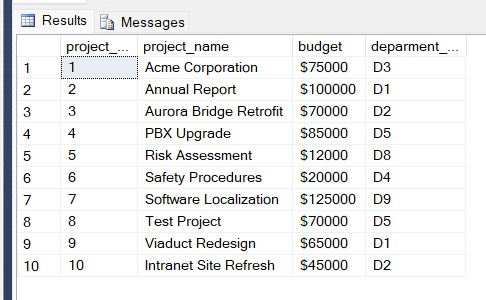
insert into tbl\_proj values('Software Localization','$125000','D9')

insert into tbl\_proj values('Test Project','$70000','D5')

insert into tbl\_proj values('Viaduct Redesign','$65000','D1')

insert into tbl\_proj values('Intranet Site Refresh','$45000','D2')

select \* from tbl\_proj



* **Create Table: tbl\_dept:**

insert into tbl\_dept values('D1','Finance',5)

insert into tbl\_dept values('D2','Operations',3)

insert into tbl\_dept values('D3','Sales',2)

insert into tbl\_dept values('D4','It',10)

insert into tbl\_dept values('D5','Administration',1)

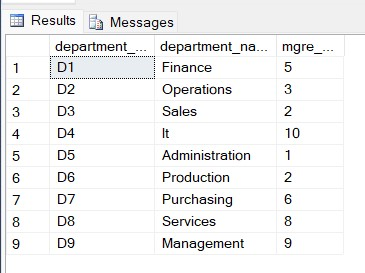
insert into tbl\_dept values('D6','Production',2)

insert into tbl\_dept values('D7','Purchasing',6)

insert into tbl\_dept values('D8','Services',8)

insert into tbl\_dept values('D9','Management',9)

select \* from tbl\_dept



* **Create Table: tbl\_workson:**

insert into tbl\_workson values(1,5,'Manager',10)

insert into tbl\_workson values(2,4,'Sales Manager',9)

insert into tbl\_workson values(3,2,'Software Engineer',8)

insert into tbl\_workson values(4,5,'Administrative Assistant',12)

insert into tbl\_workson values(5,7,'Project Manager',7)

insert into tbl\_workson values(6,8,'Chaiperson',10)

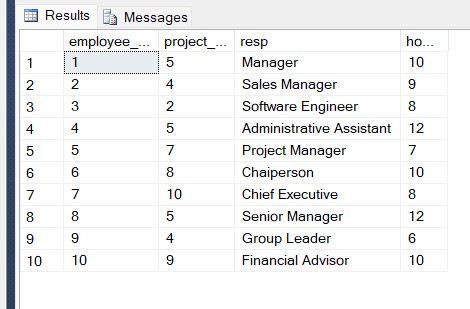
insert into tbl\_workson values(7,10,'Chief Executive',8)

insert into tbl\_workson values(8,5,'Senior Manager',12)

insert into tbl\_workson values(9,4,'Group Leader',6)

insert into tbl\_workson values(10,9,'Financial Advisor',10)

select \* from tbl\_workson



* **Queries :**

1. **Write an SQL query that returns the project number and name for projects with a budget greater than $100,000.**
   * select

project\_no , project\_name

from

tbl\_proj

where

budget > '$100000'

1. **Write an SQL query that returns all works on records where hours worked is less than 10 and the responsibility is ‘Manager’.**
   * select \* from

tbl\_workson

where

hours < 10 and resp = 'Manager'

1. **Write an SQL query that returns the employees (number and name only) who have a title of ‘EEE’ or ‘SA’ and make more than $35,000.**
   * select

employee\_no,

employee\_name

from

tbl\_employee

where

(title = 'EEE' or title='SA') and salary >35000

1. **Write an SQL query that returns the employees (name only) in department ‘D1’ ordered by decreasing salary.**
   * select

employee\_name

from

tbl\_employee

where

department\_no='D1'

order by

salary desc

1. **Write an SQL query that returns the departments (all fields) ordered by ascending department name.**
   * select \*

from

tbl\_dept

order by

department\_name asc

1. **Write an SQL query that returns the employee name, department name, and employee title.**
   * select

emp.employee\_name,

dept.department\_name,

emp.title

from

tbl\_employee emp

inner join

tbl\_dept dept

on

dept.department\_no = emp.department\_no

1. **Write SQL query that returns the project name, hours worked, and project number for all works on records where hours > 10.**
   * select

proj.project\_name,

work.hours,

proj.project\_no

from

tbl\_proj proj

inner join

tbl\_workson work

on

proj.project\_no=work.project\_no

where

hours > 10

1. **Write an SQL query that returns the project name, department name, and budget for all projects with a budget < $50,000.**
   * select

proj.project\_name,

dept.department\_name,

proj.budget

from

tbl\_dept dept

inner join

tbl\_proj proj

on

proj.deparment\_no=dept.department\_no

where

budget < '$50000'

1. **Write an SQL query that returns the employee numbers and salaries of all employees in the ‘Consulting’ department ordered by descending salary.**
   * select

emp.employee\_no,

emp.salary

from

tbl\_employee emp

inner join

tbl\_dept dept

on

emp.department\_no=dept.department\_no

where

department\_name='Consulting'

order by

salary desc

1. **Write an SQL query that returns the employee name, project name, employee title and hours for all works on records.**
   * select

emp.employee\_name,

proj.project\_name,

emp.title,

work.hours

from

tbl\_employee emp

inner join

tbl\_workson work

on

emp.employee\_no=work.employee\_no

inner join

tbl\_proj proj

on

proj.project\_no=work.project\_no

* **Create Table: tbl\_emp:**

insert into tbl\_emp values('A',2)

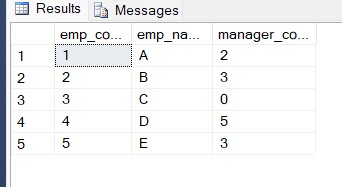
insert into tbl\_emp values('B',3)

insert into tbl\_emp values('C',0)

insert into tbl\_emp values('D',5)

insert into tbl\_emp values('E',3)

select \* from tbl\_emp



* **Create Table: tbl\_manager:**

insert into tbl\_manager values('D')

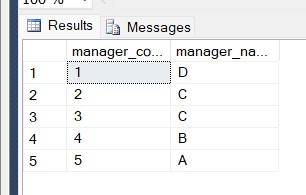
insert into tbl\_manager values('C')

insert into tbl\_manager values('C')

insert into tbl\_manager values('B')

insert into tbl\_manager values('A')

select \* from tbl\_manager



1. **Write an SQL query that returns the employee name their manager name by using manager code.**
   * select

emp.emp\_name,

man.manager\_name

from

tbl\_emp emp

inner join

tbl\_manager man

on

man.manager\_code=emp.manager\_code