**PROJECT**

**CODE:**

**Data Definition Language (DDL)**

CREATE TABLE DepartmentDB(

dept\_id numeric(4) NOT NULL PRIMARY KEY,

d\_name nvarchar(100) NOT NULL,

contact\_no numeric(10) NOT NULL UNIQUE

);

CREATE TABLE EmployeeDB(

emp\_id numeric(4) NOT NULL PRIMARY KEY,

dept\_id numeric(4) NOT NULL,

emp\_name nvarchar(100) NOT NULL,

designation nvarchar(100) NOT NULL,

salary money NOT NULL,

FOREIGN KEY(dept\_id) REFERENCES DepartmentDB(dept\_id)

);

ALTER TABLE DepartmentDB ADD city nvarchar(50);

ALTER TABLE EmployeeDB ALTER COLUMN salary char(10);

ALTER TABLE DepartmentDB DROP COLUMN city;

EXEC sp\_rename 'DepartmentDB.d\_name','dept\_name','COLUMN';

**Data Manipulation Language (DML)**

CREATE TABLE Employee(

emp\_id char(10) NOT NULL,

dept\_id char(10) NOT NULL,

emp\_name varchar(20) NOT NULL,

desig varchar(20) NOT NULL,

salary numeric(10) NOT NULL,

contact\_no varchar(10) NOT NULL,

city varchar(20) NOT NULL

);

INSERT INTO Employee(emp\_id,dept\_id,emp\_name,desig,salary,contact\_no,city) VALUES ('1','1','S Ahmad','Sales Mgr',50000,'0110','New Delhi');

INSERT INTO Employee(emp\_id,dept\_id,emp\_name,desig,salary,contact\_no,city) VALUES ('2','2','Anand','Senior Mgr',40000,'0111','New Delhi');

INSERT INTO Employee(emp\_id,dept\_id,emp\_name,desig,salary,contact\_no,city) VALUES ('3','3','Aruna','Accounts Mgr',45000,'0112','New Delhi');

INSERT INTO Employee(emp\_id,dept\_id,emp\_name,desig,salary,contact\_no,city) VALUES ('4','3','Alpesh','Accountant',35000,'0113','Bangalore');

INSERT INTO Employee(emp\_id,dept\_id,emp\_name,desig,salary,contact\_no,city) VALUES ('5','1','Monica','Incharge',25000,'0114','Noida');

INSERT INTO Employee(emp\_id,dept\_id,emp\_name,desig,salary,contact\_no,city) VALUES ('6','1','Harish','Sales Man',15000,'0115','Bangalore');

UPDATE Employee SET contact\_no='0116' WHERE city='Bangalore' AND emp\_id='6';

SELECT emp\_id,emp\_name,desig FROM Employee;

SELECT \* FROM Employee WHERE salary>30000;

SELECT \* FROM Employee WHERE salary>15000 AND salary<30000;

SELECT \* FROM Employee WHERE city='Bangalore' OR city='New Delhi';

SELECT \* FROM Employee WHERE city!='Bangalore' AND city!='New Delhi';

SELECT \* FROM Employee WHERE emp\_name LIKE 'A%';

SELECT \* FROM Employee ORDER BY salary DESC;

SELECT AVG(salary) FROM Employee GROUP BY dept\_id;

SELECT dept\_id,salary,AVG(salary) AS AVGSAL FROM Employee GROUP BY dept\_id,salary HAVING AVG(salary)>30000;

**JOINS, STORED PROCEDURE AND VIEW**

CREATE TABLE Company(

emp\_id numeric(2),

emp\_name nvarchar(50),

age numeric(2) NOT NULL,

emp\_address nvarchar(50),

salary numeric(8,2),

join\_date date

);

INSERT INTO Company(emp\_id,emp\_name,age,emp\_address,salary,join\_date) VALUES (1,'PAUL',32,'CALIFORNIA',20000,'2001-07-13');

INSERT INTO Company(emp\_id,emp\_name,age,emp\_address,salary,join\_date) VALUES (2,'ALEN',23,'NORWAY',20000,null);

INSERT INTO Company(emp\_id,emp\_name,age,emp\_address,salary,join\_date) VALUES (3,'DAVID',25,'RICHMOND',65000,'2010-10-25');

INSERT INTO Company(emp\_id,emp\_name,age,emp\_address,salary,join\_date) VALUES (4,'MARK',27,'TEXAS',35000,'2015-11-02');

INSERT INTO Company(emp\_id,emp\_name,age,emp\_address,salary,join\_date) VALUES (5,'TEDDY',25,'LAS VEGAS',null,'2013-09-01');

CREATE TABLE Dept(

dept\_id numeric(1),

dept\_name nvarchar(20),

emp\_id numeric(2)

);

INSERT INTO Dept(dept\_id,dept\_name,emp\_id) VALUES (1,'IT BILLING',1);

INSERT INTO Dept(dept\_id,dept\_name,emp\_id) VALUES (2,'ENGINEERING',2);

INSERT INTO Dept(dept\_id,dept\_name,emp\_id) VALUES (3,'FINANCE',41);

SELECT t1.emp\_id AS emp\_id,t1.emp\_name AS emp\_name,t2.dept\_name AS dept\_name,t2.dept\_id AS dept\_id,t1.age AS age,t1.salary AS salary

FROM Company AS t1 FULL OUTER JOIN Dept AS t2

ON t1.emp\_id=t2.emp\_id WHERE t1.emp\_id=2;

GO

CREATE PROCEDURE sp\_GETEMPLOYEEINFO(@empid AS INT)

AS

BEGIN

SELECT t1.emp\_id AS emp\_id,

t1.emp\_name AS emp\_name,

t2.dept\_name AS dept,

t2.dept\_id AS dept\_id,

t1.age AS age,

t1.salary AS salary

FROM Company AS t1 FULL OUTER JOIN Dept AS t2

ON t1.emp\_id=t2.emp\_id

END;

GO

USE[master]

GO

DECLARE @return\_value INT

EXEC @return\_value=[dbo].[sp\_GETEMPLOYEEINFO]

@empid=1;

GO

CREATE VIEW emp\_dept\_view AS

SELECT t1.emp\_id AS emp\_id,t1.emp\_name AS emp\_name,t2.dept\_name AS dept\_name,t2.dept\_id AS dept\_id,t1.age AS age,t1.salary AS salary

FROM Company AS t1 FULL OUTER JOIN Dept AS t2

ON t1.emp\_id=t2.emp\_id;

GO

SELECT \* FROM emp\_dept\_view;