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;
```