Stored Procedures (Lab – 2)

1. All tables Insert

a. Insert into Department table

```
CREATE PROCEDURE PR_Department_Insert
    @DepartmentID        int,
    @DepartmentName      varchar(100)
AS
BEGIN
    INSERT INTO  Department
    (
        DepartmentID,
        DepartmentName
    )
    VALUES
    (
        @DepartmentID,
        @DepartmentName
    )
END
```

b. Insert into Designation table

```
CREATE PROCEDURE PR_Designation_Insert
    @DesignationID       int,
    @DesignationName     varchar(100)
AS
BEGIN
    INSERT INTO Designation
    (
        DesignationID,
        DesignationName
    )
    VALUES
    (
        @DesignationID,
        @DesignationName
    )
END
```

c. Insert into Person table

```
CREATE PROCEDURE PR_PERSON_Insert
    @FirstName    varchar(50),
    @LastName     varchar(50),
    @Salary       decimal(8,2),
    @JoiningDate         datetime,
    @DepartmentID        int,
    @DesignationID       int
```

```sql
AS
BEGIN
        INSERT INTO Person
        (
                FirstName,
                LastName,
                Salary,
                JoiningDate,
                DepartmentID,
                DesignationID
        )
        VALUES
        (
                @FirstName,
                @LastName,
                @Salary ,
                @JoiningDate ,
                @DepartmentID ,
                @DesignationID
        )
END
```

2. **All tables Update**

   a. **Update Department table**

```sql
CREATE PROCEDURE PR_Department_Update
        @DepartmentID       int,
        @DepartmentName     varchar(100)
AS
BEGIN
        UPDATE Department
        SET
                DepartmentName = @DepartmentName
        WHERE DepartmentID = @DepartmentID
END
```

   b. **Update Designation table**

```sql
CREATE PROCEDURE PR_Designation_Update
        @DesignationID       int,
        @DesignationName     varchar(100)
AS
BEGIN
        UPDATE Designation
        SET
                DesignationName = @DesignationName
        WHERE DesignationID = @DesignationID
END
```

c. **Update Person table**

```
CREATE PROCEDURE PR_Person_Update
        @WorkerID           int,
        @FirstName          varchar(100),
        @LastName           varchar(100),
        @Salary             decimal(8,2),
        @JoiningDate        datetime,
        @DepartmentID       int,
        @DesignationID      int
AS
BEGIN
        UPDATE Person
        SET
                FirstName = @FirstName,
                LastName = @LastName,
                Salary = @Salary,
                JoiningDate = @JoiningDate,
                DepartmentID = @DepartmentID,
                DesignationID = @DesignationID
        WHERE WorkerID = @WorkerID
END
```

3. **All tables Delete**

a. **Delete from Department table**

```
CREATE PROCEDURE PR_Department_Delete
        @DepartmentID       int
AS
BEGIN
        DELETE FROM Department
        WHERE DepartmentID = @DepartmentID
END
```

b. **Delete from Designation table**

```
CREATE PROCEDURE PR_Designation_Delete
        @DesignationID      int
AS
BEGIN
        DELETE FROM Designation
        WHERE DesignationID = @DesignationID
END
```

c. **Delete from Person table**

```
CREATE PROCEDURE PR_Person_Delete
        @WorkerID       int
AS
BEGIN
        DELETE FROM Person
```

Darshan
UNIVERSITY
योग: कर्मसु कौशलम्

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```
                    WHERE WorkerID = @WorkerID
            END
4.  All tables SelectPK
    a.  Select from Department table by Primary key
        CREATE PROCEDURE PR_Department_SelectPK
                @DepartmentID        int
        AS
        BEGIN
                SELECT
                        DepartmentID,
                        DepartmentName
                FROM  Department
                WHERE DepartmentID = @DepartmentID
        END
    b.  Select from Designation table by Primary key
        CREATE PROCEDURE PR_Designation_SelectPK
                @DesignationID        int
        AS
        BEGIN
                SELECT
                        DesignationID,
                        DesignationName
                FROM  Designation
                WHERE DesignationID = @DesignationID
        END
    c.  Select from Person table by Primary key
        CREATE PROCEDURE PR_Person_SelectPK
                @WorkerID        int
        AS
        BEGIN
                SELECT
                        WorkerID,
                        FirstName,
                        LastName,
                        Salary,
                        JoiningDate,
                        DepartmentID,
                        DesignationID
                FROM  Person
                WHERE WorkerID = @WorkerID
        END
5.  All tables SelectAll (If foreign key is available than do join and take columns on select list)
    a.  Select All from Department table
        CREATE PROCEDURE PR_Department_SelectAll
```

```sql
AS
BEGIN
        SELECT DepartmentID, DepartmentName
        FROM Department
END
```

b. Select All from Designation table

```sql
CREATE PROCEDURE PR_Designation_SelectAll
AS
BEGIN
        SELECT DesignationID, DesignationName
        FROM Designation
END
```

c. Select All from Person table

```sql
CREATE PROCEDURE PR_Person_SelectAll
AS
BEGIN
        SELECT
                Person.WorkerID,
                Person.FirstName,
                Person.LastName,
                Person.Salary,
                Person.JoiningDate,
                Department.DepartmentName,
                Designation.DesignationName
        FROM Person
        LEFT OUTER JOIN Department
        ON Person.DepartmentID=Department.DepartmentID
        LEFT OUTER JOIN Designation
        ON Person.DesignationID=Designation.DesignationID
END
```

Stored Procedures (Lab – 3)

1. **Create Procedure that show detail of first 3 persons.**

```sql
CREATE PROCEDURE PR_SelectFirstThree_Person
AS
BEGIN
        SELECT TOP 3
                Person.WorkerID,
                Person.FirstName,
                Person.LastName,
                Person.Salary,
                Person.JoiningDate,
                Department.DepartmentName,
                Designation.DesignationName
        FROM Person
```

```
        LEFT OUTER JOIN Department
        ON Person.DepartmentID=Department.DepartmentID
        LEFT OUTER JOIN Designation
        ON Person.DesignationID=Designation.DesignationID
END
```

2. **Create Procedure that takes department dame as input and returns a table with all workers working in that department.**

```
CREATE PROCEDURE PR_Person_SelectByDepartmentName
        @DepartmentName    varchar(50)
AS
BEGIN
        SELECT
                Person.FirstName,
                Department.DepartmentName
        FROM Person
        LEFT OUTER JOIN Department
        ON Person.DepartmentID=Department.DepartmentID
        WHERE Department.DepartmentName=@DepartmentName
END
```

3. **Create Procedure that takes department name & designation name as input and returns a table with worker's first name, salary, joining date & department name.**

```
CREATE PROCEDURE PR_Person_SelectByDesignationNameDepartmentName
        @DepartmentName    varchar(200),
        @DesignationName    varchar(250)
AS
BEGIN
SELECT
                Person.FirstName,
                Person.Salary,
                Person.JoiningDate,
                Department.DepartmentName
FROM Person
LEFT OUTER JOIN Department
ON Department.DepartmentID = Person.DepartmentID
LEFT OUTER JOIN Designation
ON Designation.DesignationID = Person.DesignationID
WHERE DesignationName = @DesignationName
AND DepartmentName = @DepartmentName
END
```

4. **Create Procedure that takes first name as an input parameter and display all the details of the worker with their department & designation name.**

```
CREATE PROCEDURE PR_Person_SelectByFirstName
        @FirstName    varchar(200)
AS
```

```sql
BEGIN
SELECT
            Person.WorkerID,
            Person.FirstName,
            Person.LastName,
            Person.Salary,
            Person.JoiningDate,
            Department.DepartmentName,
            Designation.DesignationName
FROM Person
LEFT OUTER JOIN Department
ON Department.DepartmentID = Person.DepartmentID
LEFT OUTER JOIN Designation
ON Designation.DesignationID = Person.DesignationID
WHERE FirstName = @FirstName
END
```

5. **Create Procedure which displays department wise maximum, minimum & total salaries.**

```sql
CREATE PROCEDURE PR_Person_MaxMinTotalSalary_DepartmentWise
AS
BEGIN
SELECT
            Department.DepartmentName,
            MAX(Person.salary) as MaxSalary,
            MIN(Person.salary) as MinSalary,
SUM(Person.salary) as TotalSalary
FROM Person
INNER JOIN Department
ON Department.DepartmentID = Person.DepartmentID
GROUP BY Department.DepartmentName
END
```

6. **Create Procedure which displays designation wise maximum, minimum & total salaries.**

```sql
CREATE PROCEDURE PR_Person_MaxMinTotalSalary_DesignationWise
AS
BEGIN
SELECT
            Designation.DesignationName,
            MAX(Person.salary) as MaxSalary,
            MIN(Person.salary) as MinSalary,
            SUM(Person.salary) as TotalSalary
FROM Person
INNER JOIN Designation
ON Designation.DesignationID = Person.DesignationID
GROUP BY Designation.DesignationName
END
```