# S.Y.B.SC.[C.S.] SEMESTER-4

# 403: RDBMS-II

## URL: 127.0.0.1:8081/apex

## User id: **system**

## Password: **admin123**

**Header format:**

**/***

**PC No: <PC No>**

**Faculty Name: <I/c Faculty Name>**

**Subject Name:**

**Enrollment Number: _____**

**Roll_No: < Your roll number >**

**Student Name : <Your Name>**

**Class : <Class>                 Div : <Div>**

**Assignment: <Assignment_No>  Date: <Assignment_Date>**

**Assignment Aim:**

**Program Title: < >**

***/**

**NOTE: Complete your journal with certificate and index at least 20 programs out of 24 programs in index.**

- **Consider subquery as one program and view as one program.**

- **Write date as mention in your print out for assignment.**

# Assignment-7

## Aim: Package & triggers

## Basic:

1) Write a package spec and package body to declare and define contain following:
   1) function :input department id and return total number of records of employee whose designation is 'manager'
   2) procedure: deletes a record from table as given employee id..
2) Create trigger for insert records in employee table also same insert that record display on screen.

## Moderate:

3) Create trigger for to update basic salary increment with Rs.5000 in employee table. Display old and new value of basic salary.

## Advance:

4) Create package which contains:
   1) display empname, salary and designation of the emp who earned less than 2000.
   2) display all employee information in descending order.
5) Create trigger for delete records from employee table. And and inert records in copyemp table with same table structure as employee.[NOTE create table copyemp before implement]

# Assignment-6

## Aim: procedure & functions

## Basic:

1. Write procedure get_area input length and width from the user and calculate area through the procedure.

2. Write function which calculate the factorial of given no.

## Moderate:

3. Write a procedure which display employee information which have computer department.

4. Write a function that calculates total number of employees that are working in the given department.
5. Write a procedure with inputted department number that increment SALARY by Rs.1000 for same department in the EMP table

# Practice Work

# Aim: PL/SQL block using cursors

1. Write a pl/sql block which display departmentwise employee details.

2. Write a pl/sql block which input designation and display all records who have inputted designation.

3. Write a pl/sql block which update employee designation whose employee number is inputted by user.

4. Write a pl/sql block which delete all records whose employee number between 101 to 105.

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# Assignment-5

## Aim: Explicit cursors

### Basic:

1. Write a PL/SQL block with the use of cursor FOR loop to display the information of EMP table.

### Moderate:

2. Write a program using a cursor to display employee information whose name started with 'R' and basic salary is more then 5000

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# Assignment-4

## Aim: Implicit cursors

## Department table: dept_id (primary key),dept_name

## Employee table: Emp_no (primary key), emp_name, designation,basic_salary, dept_id (reference key department table(dept_id)

## NOTE : Insert appropriate records as per problem definitions.

### Basic:
1. Write a program using a cursor to display the name, department name and basic salary of the Item for given Employee id

2. Write a program that to insert any record into emp table and display the message " record inserted" if record is insert .[ uses a cursor attribute SQL%NOTFOUND]

### Moderate:
1. Write a program that display total number of records whose employee name is started with 'R' character.[Uses a cursor attribute %ROWCOUNT]
2. Write a program that change field designation as 'manager' record of those employee whose basic salary is more than 5000.[Use update query] ans display message about 'Records updated.'

# Assignment-3

## Aim: VIEWS

StudentDetails :

| S_ID | NAME | ADDRESS |
|------|------|---------|
| 1 | Harsh | Kolkata |
| 2 | Ashish | Durgapur |
| 3 | Pratik | Delhi |
| 4 | Dhanraj | Bihar |
| 5 | Ram | Rajasthan |

StudentMarks :

| ID | NAME | MARKS | AGE |
|----|------|-------|-----|
| 1 | Harsh | 90 | 19 |
| 2 | Suresh | 50 | 20 |
| 3 | Pratik | 80 | 19 |
| 4 | Dhanraj | 95 | 21 |
| 5 | Ram | 85 | 18 |

1. create a View named DetailsView from the table StudentDetails.
2. create a view named StudentNames from the table StudentDetails.
3. create a View named MarksView from two tables StudentDetails and StudentMarks
4. to update the view **MarksView** and add the field AGE to this View from **StudentMarks** Table.
5. insert a row in a View StudentNames.
6. deleting a row from a view    DetailsView first delete the row from the actual table and the change is then reflected.

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# Assignment-2

## Aim: Subqueries

Make following tables and set appropriate constraints on them.

Table **Store_Information**

| Store_Name | Sales | Txn_Date |
|------------|-------|----------|
| Los Angeles | 1500 | Jan-05-1999 |
| San Diego | 250 | Jan-07-1999 |
| Los Angeles | 300 | Jan-08-1999 |
| Boston | 700 | Jan-08-1999 |

Table **Geography**

| Region_Name | Store_Name |
|-------------|------------|
| East | Boston |
| East | New York |
| West | Los Angeles |
| West | San Diego |

1. Write a subquery to find the sales of all stores in the West region.

2. Apply following example of correlated query and write result difference. Justify it.
   **SELECT SUM (a1.Sales) FROM Store_Information a1**
   **WHERE a1.Store_Name IN**
   **(SELECT Store_Name FROM Geography a2**
   **WHERE a2.Store_Name = a1.Store_Name);**

3. Apply EXISTS and justify your answer:
   **SELECT SUM(Sales) FROM Store_Information**
   **WHERE EXISTS**
   **(SELECT * FROM Geography**
   **WHERE Region_Name = 'West');**

4. Use group by to find total sales for each store.
5. to find total sales for each product at each store.
6. To see only the stores with sales over 1,500.[use having clause]

# Assignment-1

## Aim: PL/SQL BLOCKS

**Basic:**

1. Write pl/sql which display your name,birth date and contact number.
2. Write PL\SQL Block ASSIGN two value A & B from user and display result of A*B.
3. Write PL\SQL Block Calculate **simple interest** calculate to find A, the Final Investment Value, using the **simple interest formula**:

   A = PRT/100

   where P is the Principal amount of money to be invested at an **Interest** Rate R% per period for T :Number of Time Periods.

4. Write a pl/sql code to find cube of a given number.

   **Moderate: use of nested if,elsif statement**

5. Write a PL/SQL block to print smallest number from three different numbers.

6.  Write a PL/SQL block to print middle number from three different numbers.

    **Advance:**
7.  Write a pl/SQL block which identify a person is eligible for voting in election or not. [Hint: if a person is male and age is 21 then he is eligible. If a person is female and age is 18 then she is eligible.]
8.  Write a PL/SQL block to assign 5 different subject marks ,calculate total and percentage Display grade of student. Take mark from user. If percentage is grater than 60 then grade is " first class" ,if percentage is between 50 to 59 than grade is "Second Class", If percentage is between 40 to 49 than grade is "Pass class" if percentage is less than 40 than grade is "Pass Class".