**------------------------------Lab1-------------------------**

---------CREATE TABLE DEPOSIT--------

CREATE TABLE DEPOSIT(

ACTNO INT,

CNAME VARCHAR(50),

BNAME VARCHAR(50),

AMOUNT DECIMAL(8,2),

ADATE DATETIME

);

--INSERT VALUE IN DEPOSIT--

INSERT INTO DEPOSIT VALUES

(101,'ANIL','VRCE',1000.00,'1995-3-1'),

(102,'SUNIL','AJNI',5000.00,'1996-1-4'),

(103,'MEHUL','KAROLBAGH',3500.00,'1995-11-17'),

(104,'MADHURI','CHANDI',1200.00,'1995-12-17'),

(105,'PRAMOD','M.G.ROAD',3000.00,'1996-3-27'),

(106,'SANDIP','ANDHERI',2000.00,'1996-3-31'),

(107,'SHIVANI','VIRAR',1000.00,'1995-9-5'),

(108,'KRANTI','NEHRU PLACE',5000.00,'1995-7-2'),

(109,'MINU','POWAI',7000.00,'1995-8-10')

------CREATE TABLE BRANCH-----------

CREATE TABLE BRANCH(

BNAME VARCHAR(50),

CITY VARCHAR(50),

);

--INSERT VALUE IN BRANCH--

INSERT INTO BRANCH VALUES

('VRCE','NAGPUR'),

('AJNI','NAGPUR'),

('KAROLBAGH','DELHI'),

('CHANDI','DELHI'),

('DHARAMPETH','NAGPUR'),

('M.G. ROAD','BANGLORE'),

('ANDHERI','BOMBAY'),

('VIRAR','BOMBAY'),

('NEHRU PLACE','DELHI'),

('POWAI','BOMBAY')

--------CREATE TABLE CUSTOMERS---------

CREATE TABLE CUSTOMERS(

CNAME VARCHAR(50),

CITY VARCHAR(50),

);

--INSERT VALUE IN CUSTOMERS--

INSERT INTO CUSTOMERS VALUES

('ANIL','CALCUTTA'),

('SUNIL','DELHI'),

('MEHUL','BARODA'),

('MANDAR','PATNA'),

('MADHURI','NAGPUR'),

('PRAMOD','NAGPUR'),

('SANDIP','SURAT'),

('SHIVANI','BOMBAY'),

('KRANTI','BOMBAY'),

('NAREN','BOMBAY')

--------CREATE TABLE BORROW----------

CREATE TABLE BORROW(

LOANNO INT,

CNAME VARCHAR(50),

BNAME VARCHAR(50),

AMOUNT DECIMAL(8,2),

);

--INSERT VALUE IN BORROW--

INSERT INTO BORROW VALUES

(201,'ANIL','VRCE',1000.00),

(206,'MEHUL','AJNI',5000.00),

(311,'SUNIL','DHARAMPETH',3000.00),

(321,'MADHURI','ANDHERI',2000.00),

(375,'PRAMOD','VIRAR',8000.00),

(481,'KRANTI','NEHRU PLACE',3000.00)

**-------------------------------Lab6-----------------------------**

----------------Math Function-------------

------------Part-B--------

------CREATE TABLE------

CREATE TABLE EMP\_MASTER(

EMPNO INT,

EMPNAME VARCHAR(20),

JOININGDATE DATE,

SALARY DECIMAL(7,2),

COMMISSION INT,

CITY VARCHAR(20),

DEPTCODE VARCHAR(10)

);

-----INSERT VALUES IN TABLE--------------

INSERT INTO EMP\_MASTER VALUES

(101,'Keyur','2002-01-05',12000.00,4500,'Rajkot','3@g'),

(102,'Hardik','2004-02-15',14000.00,2500,'Ahmedabad','3@'),

(103,'Kajal','2006-03-14',15000.00,3000,'Baroda','3-GD'),

(104,'Bhoomi','2005-06-23',12500.00,1000,'Ahmedabad',' 1A3D'),

(105,'Harmit','2004-02-15',14000.00,2000,'Rajkot','312A')

-------------------Date Function-----------------------------

---Date Formate—

|  |  |  |
| --- | --- | --- |
| **100** | mon dd yyyy hh:miAM/PM | Aug 10 2025 7:45PM |
| **101** | mm/dd/yyyy | 08/10/2025 |
| **102** | yyyy.mm.dd | 2025.08.10 |
| **103** | dd/mm/yyyy | 10/08/2025 |
| **104** | dd.mm.yyyy | 10.08.2025 |
| **105** | dd-mm-yyyy | 10-08-2025 |
| **106** | dd mon yyyy | 10 Aug 2025 |
| **107** | Mon dd, yyyy | Aug 10, 2025 |
| **108** | hh:mi:ss | 19:45:32 |
| **109** | mon dd yyyy hh:mi:ss:mmmAM (or PM) | Aug 10 2025 7:45:32:123PM |
| **110** | mm-dd-yyyy | 08-10-2025 |
| **111** | yyyy/mm/dd | 2025/08/10 |
| **112** | yyyymmdd | 20250810 |

------------------------------------------------Lab-9--------------------------------------------------------------

CREATE TABLE Author (

AuthorID INT PRIMARY KEY,

AuthorName VARCHAR(100) NOT NULL,

Country VARCHAR(50)

);

INSERT INTO Author (AuthorID, AuthorName, Country) VALUES

(1, 'Chetan Bhagat', 'India'),

(2, 'Arundhati Roy', 'India'),

(3, 'Amish Tripathi', 'India'),

(4, 'Ruskin Bond', 'India'),

(5, 'Jhumpa Lahiri', 'India'),

(6, 'Paulo Coelho', 'Brazil'),

(7, 'Sudha Murty', 'India');

CREATE TABLE Publisher (

PublisherID INT PRIMARY KEY,

PublisherName VARCHAR(100) NOT NULL UNIQUE,

City VARCHAR(50) NOT NULL

);

INSERT INTO Publisher (PublisherID, PublisherName, City) VALUES

(1, 'Rupa Publications', 'New Delhi'),

(2, 'Penguin India', 'Gurugram'),

(3, 'HarperCollins India', 'Noida'),

(4, 'Aleph Book Company', 'New Delhi');

CREATE TABLE Book (

BookID INT PRIMARY KEY,

Title VARCHAR(200) NOT NULL,

AuthorID INT NOT NULL,

PublisherID INT NOT NULL,

Price DECIMAL(8,2) NOT NULL,

PublicationYear INT NOT NULL,

FOREIGN KEY (AuthorID) REFERENCES Author(AuthorID),

FOREIGN KEY (PublisherID) REFERENCES Publisher(PublisherID)

);

INSERT INTO Book (BookID, Title, AuthorID, PublisherID, Price, PublicationYear) VALUES

(101, 'Five Point Someone', 1, 1, 250.00, 2004),

(102, 'The God of Small Things', 2, 2, 350.00, 1997),

(103, 'Immortals of Meluha', 3, 3, 300.00, 2010),

(104, 'The Blue Umbrella', 4, 1, 180.00, 1980),

(105, 'The Lowland', 5, 2, 400.00, 2013),

(106, 'Revolution 2020', 1, 1, 275.00, 2011),

(107, 'Sita: Warrior of Mithila', 3, 3, 320.00, 2017),

(108, 'The Room on the Roof', 4, 4, 200.00, 1956);

---------Lab8--------------------

CREATE TABLE DEPT (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100) NOT NULL UNIQUE,

DepartmentCode VARCHAR(50) NOT NULL UNIQUE,

Location VARCHAR(50) NOT NULL

);

INSERT INTO DEPT (DepartmentID, DepartmentName, DepartmentCode, Location) VALUES

(1, 'Admin', 'Adm', 'A-Block'),

(2, 'Computer', 'CE', 'C-Block'),

(3, 'Civil', 'CI', 'G-Block'),

(4, 'Electrical', 'EE', 'E-Block'),

(5, 'Mechanical', 'ME', 'B-Block');

CREATE TABLE PERSON (

PersonID INT PRIMARY KEY,

PersonName VARCHAR(100) NOT NULL,

DepartmentID INT NULL,

Salary DECIMAL(8,2) NOT NULL,

JoiningDate DATETIME NOT NULL,

City VARCHAR(100) NOT NULL,

FOREIGN KEY (DepartmentID) REFERENCES DEPT(DepartmentID)

);

INSERT INTO PERSON (PersonID, PersonName, DepartmentID, Salary, JoiningDate, City) VALUES

(101, 'Rahul Tripathi', 2, 56000.00, '2000-01-01', 'Rajkot'),

(102, 'Hardik Pandya', 3, 18000.00, '2001-09-25', 'Ahmedabad'),

(103, 'Bhavin Kanani', 4, 25000.00, '2000-05-14', 'Baroda'),

(104, 'Bhoomi Vaishnav', 1, 39000.00, '2005-02-08', 'Rajkot'),

(105, 'Rohit Topiya', 2, 17000.00, '2001-07-23', 'Jamnagar'),

(106, 'Priya Menpara', NULL, 9000.00, '2000-10-18', 'Ahmedabad'),

(107, 'Neha Sharma', 2, 34000.00, '2002-12-25', 'Rajkot'),

(108, 'Nayan Goswami', 3, 25000.00, '2001-07-01', 'Rajkot'),

(109, 'Mehul Bhundiya', 4, 13500.00, '2005-01-09', 'Baroda'),

(110, 'Mohit Maru', 5, 14000.00, '2000-05-25', 'Jamnagar');

**--Lab 10 SubQueries**

-- Creating Tables

CREATE TABLE Department (

DID INT PRIMARY KEY,

DName VARCHAR(50)

);

CREATE TABLE Student\_data (

Rno INT PRIMARY KEY,

Name VARCHAR(50),

City VARCHAR(50),

DID INT FOREIGN KEY REFERENCES Department(DID)

);

CREATE TABLE Academic (

Rno INT FOREIGN KEY REFERENCES Student(Rno),

SPI FLOAT,

Bklog INT

);

-- Inserting Data

INSERT INTO Department VALUES (10, 'Computer'), (20, 'Electrical'), (30, 'Mechanical'), (40, 'Civil');

INSERT INTO Student VALUES (101, 'Raju', 'Rajkot', 10), (102, 'Amit', 'Ahmedabad', 20),

(103, 'Sanjay', 'Baroda', 40), (104, 'Neha', 'Rajkot', 20),

(105, 'Meera', 'Ahmedabad', 30), (106, 'Mahesh', 'Baroda', 10);

INSERT INTO Academic VALUES (101, 8.8, 0), (102, 9.2, 2), (103, 7.6, 1),

(104, 8.2, 4), (105, 7.0, 2), (106, 8.9, 3);

**--Lab 11 Implement Stored Procedure**

CREATE TABLE Department (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100) NOT NULL UNIQUE

);

-- Create Designation Table

CREATE TABLE Designation (

DesignationID INT PRIMARY KEY,

DesignationName VARCHAR(100) NOT NULL UNIQUE

);

-- Create Person Table

CREATE TABLE Pe(

PersonID INT PRIMARY KEY IDENTITY(101,1),

FirstName VARCHAR(100) NOT NULL,

LastName VARCHAR(100) NOT NULL,

Salary DECIMAL(8, 2) NOT NULL,

JoiningDate DATETIME NOT NULL,

DepartmentID INT NULL,

DesignationID INT NULL,

FOREIGN KEY (DepartmentID) REFERENCES Department(DepartmentID),

FOREIGN KEY (DesignationID) REFERENCES Designation(DesignationID)

);

-------Insert Value—

INSERT INTO Pe (FirstName, LastName, Salary, JoiningDate, DepartmentID, DesignationID) VALUES

('Rahul', 'Anshu', 56000, '1990-01-01', 1, 12),

('Hardik', 'Hinsu', 18000, '1990-09-25', 2, 11),

('Bhavin', 'Kamani', 25000, '1991-05-14', NULL, 11),

('Bhoomi', 'Patel', 39000, '2014-02-20', 1, 13),

('Rohit', 'Rajgor', 17000, '1990-07-23', 2, 15),

('Priya', 'Mehta', 25000, '1990-10-18', 2, NULL),

('Neha', 'Trivedi', 18000, '2014-02-20', 3, 15);

INSERT INTO Department (DepartmentID, DepartmentName) VALUES

(1, 'Admin'),

(2, 'IT'),

(3, 'HR'),

(4, 'Account');

INSERT INTO Designation (DesignationID, DesignationName) VALUES

(11, 'Jobber'),

(12, 'Welder'),

(13, 'Clerk'),

(14, 'Manager'),

(15, 'CEO');

**--Lab 12 Implement Advanced Stored Procedure**

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100) NOT NULL UNIQUE,

ManagerID INT NOT NULL,

Location VARCHAR(100) NOT NULL

);

CREATE TABLE Employee (

EmployeeID INT PRIMARY KEY,

FirstName VARCHAR(100) NOT NULL,

LastName VARCHAR(100) NOT NULL,

DoB DATETIME NOT NULL,

Gender VARCHAR(50) NOT NULL,

HireDate DATETIME NOT NULL,

DepartmentID INT NOT NULL,

Salary DECIMAL(10, 2) NOT NULL,

FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)

);

-- Create Projects Table

CREATE TABLE Projects (

ProjectID INT PRIMARY KEY,

ProjectName VARCHAR(100) NOT NULL,

StartDate DATETIME NOT NULL,

EndDate DATETIME NOT NULL,

DepartmentID INT NOT NULL,

FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)

);

INSERT INTO Departments (DepartmentID, DepartmentName, ManagerID, Location)

VALUES

(1, 'IT', 101, 'New York'),

(2, 'HR', 102, 'San Francisco'),

(3, 'Finance', 103, 'Los Angeles'),

(4, 'Admin', 104, 'Chicago'),

(5, 'Marketing', 105, 'Miami');

INSERT INTO Employee (EmployeeID, FirstName, LastName, DoB, Gender, HireDate, DepartmentID,

Salary)

VALUES

(101, 'John', 'Doe', '1985-04-12', 'Male', '2010-06-15', 1, 75000.00),

(102, 'Jane', 'Smith', '1990-08-24', 'Female', '2015-03-10', 2, 60000.00),

(103, 'Robert', 'Brown', '1982-12-05', 'Male', '2008-09-25', 3, 82000.00),

(104, 'Emily', 'Davis', '1988-11-11', 'Female', '2012-07-18', 4, 58000.00),

(105, 'Michael', 'Wilson', '1992-02-02', 'Male', '2018-11-30', 5, 67000.00);

INSERT INTO Projects (ProjectID, ProjectName, StartDate, EndDate, DepartmentID)

VALUES

(201, 'Project Alpha', '2022-01-01', '2022-12-31', 1),

(202, 'Project Beta', '2023-03-15', '2024-03-14', 2),

(203, 'Project Gamma', '2021-06-01', '2022-05-31', 3),

(204, 'Project Delta', '2020-10-10', '2021-10-09', 4),

(205, 'Project Epsilon', '2024-04-01', '2025-03-31', 5);

**---Lab 13 User Define Function(UDF)–**

**--**for Table valued function use tables of Lab-2

**--Lab 14 Implement Cursor ---**

CREATE TABLE Products (

Product\_id INT PRIMARY KEY,

Product\_Name VARCHAR(250) NOT NULL,

Price DECIMAL(10, 2) NOT NULL

);

-- Insert data into the Products table

INSERT INTO Products (Product\_id, Product\_Name, Price) VALUES

(1, 'Smartphone', 35000),

(2, 'Laptop', 65000),

(3, 'Headphones', 5500),

(4, 'Television', 85000),

(5, 'Gaming Console', 32000);

**-------Lab 15 Implement Trigger----**

CREATE TABLE PersonInfo (

PersonID INT PRIMARY KEY,

PersonName VARCHAR(100) NOT NULL,

Salary DECIMAL(8,2) NOT NULL,

JoiningDate DATETIME NULL,

City VARCHAR(100) NOT NULL,

Age INT NULL,

BirthDate DATETIME NOT NULL

);

-- Creating PersonLog Table

CREATE TABLE PersonLog (

PLogID INT PRIMARY KEY IDENTITY(1,1),

PersonID INT NOT NULL,

PersonName VARCHAR(250) NOT NULL,

Operation VARCHAR(50) NOT NULL,

UpdateDate DATETIME NOT NULL

);

**-----Lab 16 Implement Advanced Trigger----**

-------------------After Trigger----------

CREATE TABLE EMPLOYEEDETAILS

(

EmployeeID Int Primary Key,

EmployeeName Varchar(100) Not Null,

ContactNo Varchar(100) Not Null,

Department Varchar(100) Not Null,

Salary Decimal(10,2) Not Null,

JoiningDate DateTime Null

)

CREATE TABLE EmployeeLogs (

LogID INT PRIMARY KEY IDENTITY(1,1),

EmployeeID INT NOT NULL,

EmployeeName VARCHAR(100) NOT NULL,

ActionPerformed VARCHAR(100) NOT NULL,

ActionDate DATETIME NOT NULL

);

------------------INSTEAD TRIGGER-------------------

CREATE TABLE Movies (

MovieID INT PRIMARY KEY,

MovieTitle VARCHAR(255) NOT NULL,

ReleaseYear INT NOT NULL,

Genre VARCHAR(100) NOT NULL,

Rating DECIMAL(3, 1) NOT NULL,

Duration INT NOT NULL

);

CREATE TABLE MoviesLog

(

LogID INT PRIMARY KEY IDENTITY(1,1),

MovieID INT NOT NULL,

MovieTitle VARCHAR(255) NOT NULL,

ActionPerformed VARCHAR(100) NOT NULL,

ActionDate DATETIME NOT NULL

);

**----------------------Lab 17 Exception Handling------**

CREATE TABLE Customers (

Customer\_id INT PRIMARY KEY,

Customer\_Name VARCHAR(250) NOT NULL,

Email VARCHAR(50) UNIQUE

);

CREATE TABLE Orders (

Order\_id INT PRIMARY KEY,

Customer\_id INT,

Order\_date DATE NOT NULL,

FOREIGN KEY (Customer\_id) REFERENCES Customers(Customer\_id)

);

**------Lab18 Implement Constraints---**

CREATE TABLE STU\_MASTER (

Rno INT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

Branch VARCHAR(50) NULL,

SPI DECIMAL(4,2) NOT NULL,

Bklog INT NOT NULL

);

INSERT INTO STU\_MASTER (Rno, Name, Branch, SPI, Bklog) VALUES

(101, 'Raju', 'CE', 8.80, 0),

(102, 'Amit', 'CE', 2.20, 3),

(103, 'Sanjay', 'ME', 1.50, 6),

(104, 'Neha', 'EC', 7.65, 0),

(105, 'Meera', 'EE', 5.52, 2),

(106, 'Mahesh', NULL, 4.50, 3);