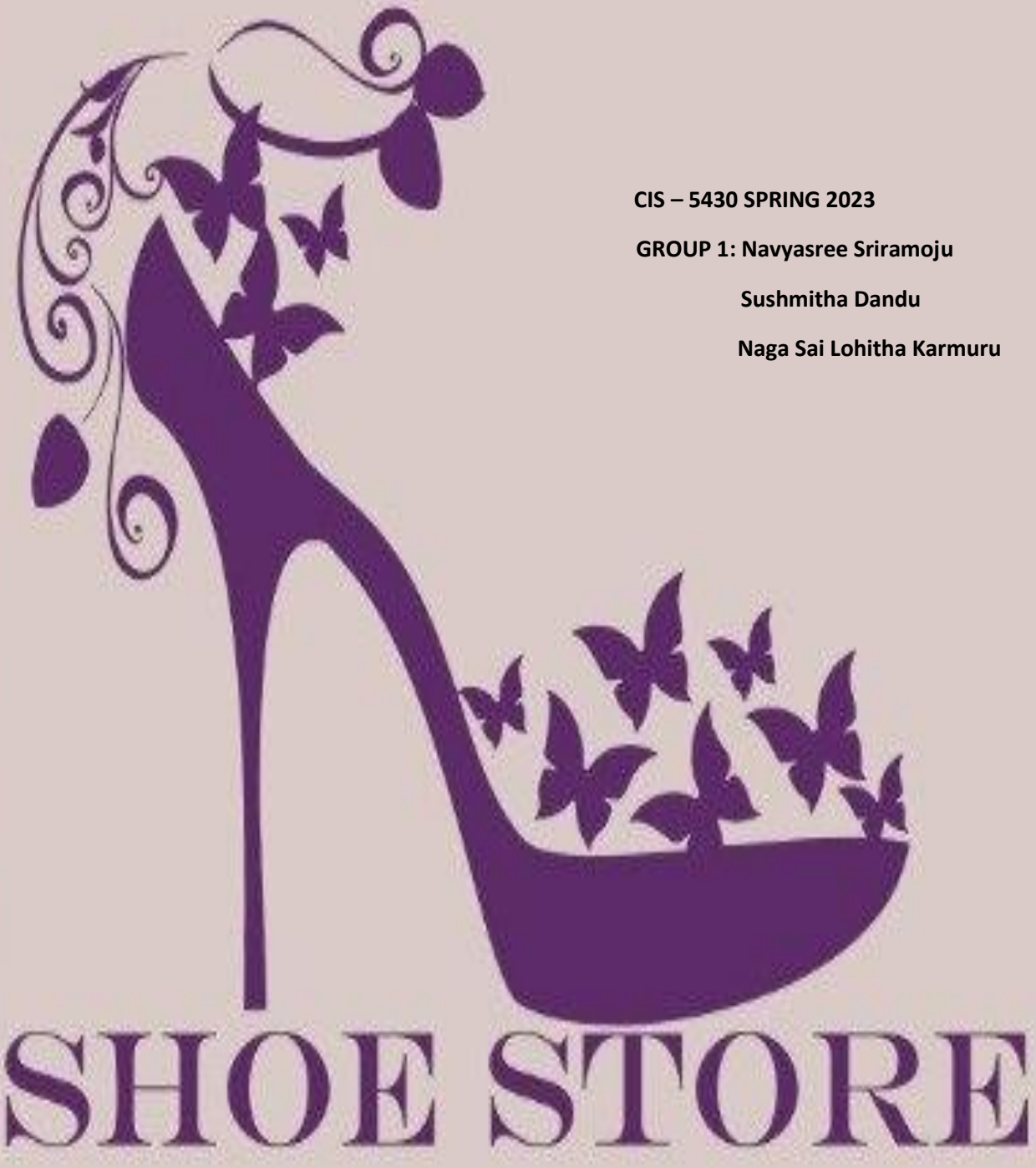
FOOTWEAR PRODUCTS

e-STORE DATABASE



CIS – 5430 SPRING 2023

GROUP 1: Navyasree Sriramoju

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CONTENTS

INTRODUCTION

Footwear stores are retail establishments that offer shoes and other footwear items. They can be found in retail malls, commercial areas, and online platforms, and they cater to customers of all ages, genders, and styles. Athletic shoes, casual shoes, formal shoes, boots, sandals, and other footwear options are available at footwear retailers, catering to various events, preferences, and fashion trends.

The main goal is to develop a comprehensive and efficient database system to support the operations of an online footwear store. The database will be built to manage many parts of the e-store, such as product management, customer information, order processing, and inventory management.

The database will be developed with ORACLE SQL, for creating, administering, and querying databases. The project will entail creating appropriate tables with the necessary constraints, loading data, and building views for efficient data retrieval. In addition, the project will make use of PL/SQL statement blocks to construct business logic and process data.

The project's mission is to provide a scalable and optimized database system that will streamline e-store operations, increase data integrity and security, and provide efficient data retrieval for various reporting and analysis applications. Our team has worked together to design and build the database structure, develop SQL queries and PL/SQL statements, and ensure that the database satisfies the requirements of the online footwear store and efficiently supports its business activities.

PURPOSE

The project's major goal is to ensure effective and reliable data management for the e-store. Creating tables with proper constraints to contain product information, customer data, and order details, as well as assuring data quality and security. Inventory management will also be handled by the database, which will keep track of available stock and update it in real-time as orders are placed and fulfilled.

Another critical goal of the project is to improve data retrieval and reporting for the e-store. Defining views that provide meaningful and relevant information to store management, such as sales reporting, order tracking, and customer analytics, is part of this. To extract important insights from the data, the project may also require the creation of complicated SQL queries that include joins, subqueries, group by, and having clauses.

FUNCTIONALITIES

The documentation for the Footwear products online shop database contains thorough information about the database's entity types, relationships, and properties. This data assists users in understanding how data is arranged and kept in the database.

The documentation also describes data validation rules and constraints to ensure that the data in the database is accurate and consistent. Defining data types, allowable values, and business rules to validate incoming data are all part of this.

DDL (Data Definition Language) and DML (Data Manipulation Language) statements are also provided in the documentation for performing Create, Read, Update, and Delete operations on the database. These instructions show users how to interact with the database in an effective and safe manner.

Additionally, the documentation provides support for Object-Relational Database Management System (ORDBMS) features such as PL/SQL data processing blocks, which can enhance performance and reduce data transfer. It also has Object Types for data and logic encapsulation, improving code organization, reusability, and security while interfacing with database capabilities.

USERS

Marketing and sales personnel can use the database to evaluate customer data, track sales, and generate marketing reports for planning and strategy.

IT Administrators: These people may oversee maintaining and administering the database's technical features, such as database performance, security, backups, and troubleshooting.

Customers that visit the e-store to buy footwear may interact with the database indirectly via the front-end interface. They can create accounts, place orders, track order status, and check their purchasing history.

Customer Service Representatives: These users can access the database to help customers with enquiries, order management, returns, and refunds. They may also use the database to obtain consumer information to give customized customer support.

Suppliers: Suppliers who supply footwear to the e-commerce site may interface with the database to update product availability, manage inventory, and process purchase orders.

ROLES

All the team members worked effectively together and contributed significantly to the project. In both Project 1 and Project 2, each team member plays a distinct role. The project's team leader did an excellent job, and the developers were quite helpful. All the team members worked well together and communicated effectively.

GROUP PROJECT 1

Conceptual and Logical Design

The online store database needs to keep track of orders for its inventory. When a customer places orders, the system must record that the order and order items. The system must update the available quantity on hand to reflect that the by product(s) has been sold. When an employee processes orders, the system must confirm that the ordered items are in stock. The online store needs to keep track of customers and employees, too. The system must update the available quantity on hand to reflect that the by product(s) has been sold. Each team create your store, database and sell your own products.

Business Rules

One customer may or may not place many orders.

One order must be placed by one and only one customer.

One order must contain one or more product.

One product may or may not be in many orders.

One employee may process one or more orders.

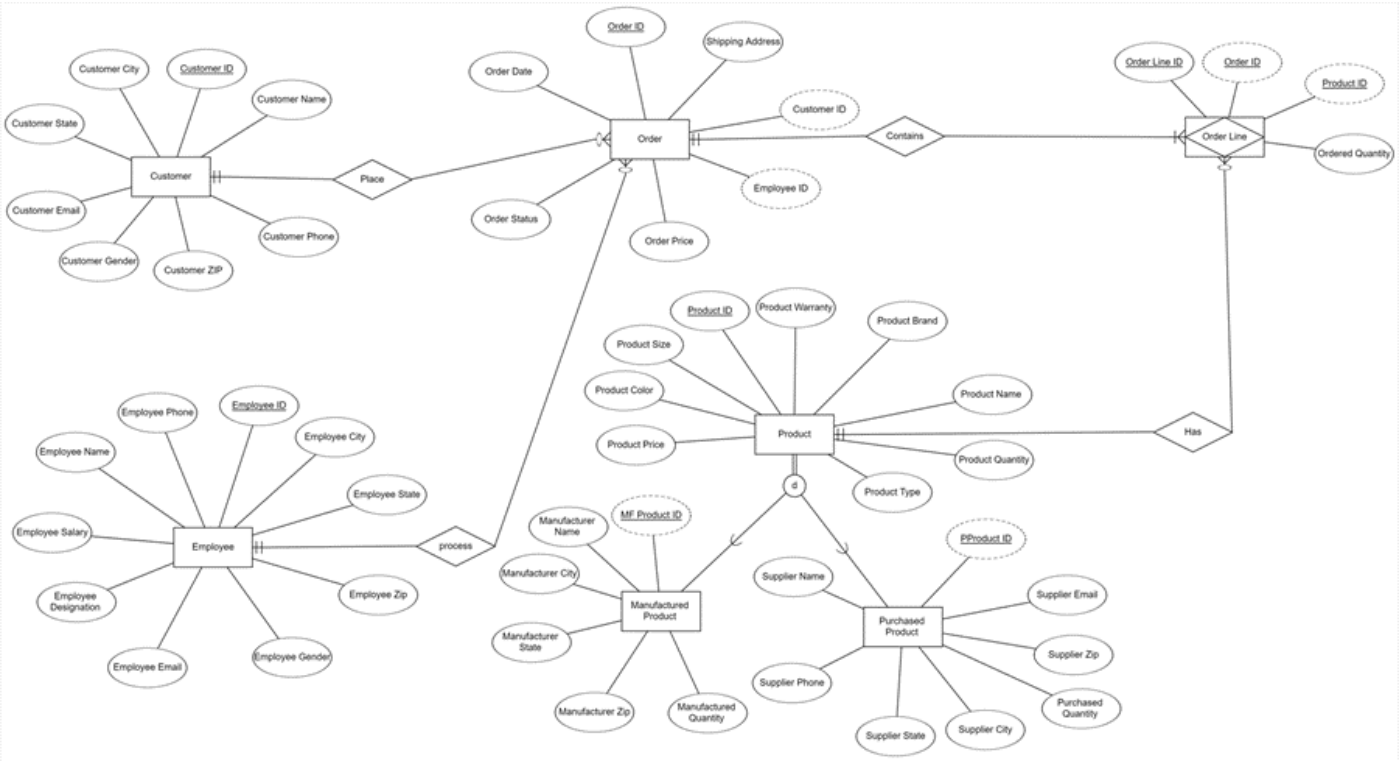
One order must be processed by one and only one employee.

One product must be either manufactured or purchased.

Identify entity types and relationship types. Fill out the following relationship matrix.

	Customer	Order	product	employee
Customer	--	Places	--	--
Order	Is Placed	--	Contains	Is Processed
Product	--	Has	Manufactured/purchased	--
Employee	--	Processes	--	--

Draw an ER/EER diagram using software tools includes 1) entity types, 2) relationship types, 3) keys, 4) attributes, and cardinality constraints (must show participation).



Database Logical Design

Map the ER diagram to a relational database schema indicating the relation name, primary key and foreign key. Add appropriate additional attributes by yourself.

Table Name: Customer

Customer ID	Customer Name	Customer Phone	Customer Email	Customer Gender	Customer City	Customer State	Customer Zip

Table Name: Order

Order ID	Order Price	Order Date	Order status	Employee ID	Customer ID	Shipping Address

Table Name: Order Line

Order Line ID	Order ID	Product ID	Ordered Quantity

Table Name: Employee

Employee ID	Employee Name	Employee Phone	Employee Email	Employee Designation	Employee Gender	Employee Salary	Employee City	Employee State	Employee Zip

Table Name: Product

Product ID	Product Name	Product Quantity	Product Type	Product Price	Product Color	Product Size	Product Warranty	Product Brand	Product Description

Table Name: Purchased Product

PProduct ID	Supplier Name	Supplier Email	Supplier Phone	Supplier State	Supplier City	Supplier Zip

Table Name: Manufactured Product

MFProduct ID	Manufacturer Name	Manufacturer State	Manufacturer City	Manufacturer Zip	Manufactured Quantity

Establish join paths for the above relational database using the referential integrity by drawing arrow lines between the above tables. Indicate all the foreign keys (FK).
F.K. -> P.K. (Foreign Key refers to Primary Key)

F.K.Order.EmployeeID à P.K.Employee.EmployeeID

F.K.Order.CustomerID à P.K. Customer.CustomerID

F.K.OrderLine.OrderID à P.K.Order.OrderID

F.K.OrderLine.ProductID à P.K.Product.ProductID

F.K.PurchasedProduct.PProductID à P.K.Product.ProductID

F.K.ManufacturedProduct.MFProductID à P.K.Product.ProductID

Do function analysis for each of your tables
Attribute A -> Attribute B (Determinant attribute(s) Determines Dependent Attribute(s))

Transitive Dependencies

Customer Zip→Customer City, Customer State

Employee Zip→Employee City, Employee State

Supplier Zip→Supplier City, Supplier State

Manufacturer Zip→Manufacturer City, Manufacturer State

Full Dependencies

Customer ID→Customer Name, Customer Phone, Customer Email, Customer Gender, Customer City, Customer State, Customer Zip

Order ID→Order Price, Order Date, Order status, Shipping Address

Order Line→Order Quantity

Employee ID→Employee ID, Employee Name, Employee Phone, Employee Email, Employee Designation, Employee Gender, Employee Salary, Employee City, Employee State, Employee Zip, Employee Salary

Product ID→Product Name, Product Quantity, Product Type, Product Price, Product Color, Product Size, Product Warranty, Product Brand

PProduct ID→Supplier Name, Supplier Phone, Supplier Email, Supplier State, Supplier City, Supplier Zip, Purchased Quantity

MFProduct ID→Manufacturer Name, Manufacturing State, Manufacturing City, Manufacturer Zip, Manufacturing Quantity

Show all the normalized tables and indicate the normalization form for each of your tables.

Table Name	1NF	2NF	3NF
Customer	✓	✓	
Order	✓	✓	✓
Order Line	✓	✓	✓
Employee	✓	✓	
Product	✓	✓	✓
Purchased Product	✓	✓	
Manufactured Product	✓	✓	
Customer Address	✓	✓	✓
Supplier Address	✓	✓	✓
Employee Address	✓	✓	✓
Manufacturer Address	✓	✓	✓

Tables in 2NF and 3NF:

Customer (2NF)

Customer ID	Customer Name	Customer Phone	Customer Gender	Customer Email	Customer Zip	Customer City	Customer State

Customer Address(3NF)

Customer ID	Customer Zip	Customer City	Customer State

Order (3NF)

Order ID	Order Price	Order Date	Order Status	Shipping Address	Employee ID	Customer ID

Order Line(3NF)

Order Line ID	Order ID	Product ID	Ordered Quantity

Employee (2NF)

Employee ID	Employee Name	Employee Phone	Employee Email	Employee Designation	Employee gender	Employee Salary	Employee City	Employee State	Employee Zip

Employee Address (3NF)

Employee ID	Employee State	Employee City	Employee Zip

Product (3NF)

Product ID	Product Name	Product Quantity	Product Type	Product Price	Product Color	Product Size	Product Warranty	Product Brand

Purchased Product (2NF)

PProduct ID	Supplier Name	Supplier Email	Supplier Phone	Supplier City	Supplier State	Supplier Zip	Purchased Quantity

Supplier Address(3NF)

PProduct ID	Supplier City	Supplier State	Supplier Zip

Manufactured Product(2NF)

MFProduct ID	Manufacturer Name	Manufacturer State	Manufacturer City	Manufacturer Zip	Manufacturer Quantity

Manufacturer Address(3NF)

MFProduct ID	Manufacturer Location	Manufacturing Site Name

GROUP PROJECT 2

Database Creation Script (Tables, Constraints and Inserting data)

Table Name: Customer (Lohitha)

```
DROP TABLE Customer CASCADE CONSTRAINTS;
CREATE TABLE Customer
(
Customer_Id VARCHAR2(20) NOT NULL,
Customer_Name VARCHAR2(25),
Customer_Phone CHAR(10),
Customer_Gender CHAR(20),
Customer_Email VARCHAR(100),
Customer_Zip VARCHAR(5),
Customer_City VARCHAR(50),
Customer_State CHAR(2),
CONSTRAINT CustomerPK PRIMARY KEY(Customer_Id),
CONSTRAINT Customer_UK_Customer_Phone UNIQUE (Customer_Phone),
CONSTRAINT Customer_NN_Customer_Name CHECK (Customer_Name IS NOT NULL)
);
```

Inserting values into Customer Table (Lohitha)

```
INSERT INTO Customer VALUES(1,'John Smith','1234567890','M','john@gmail.com','32601','New York','NY');
INSERT INTO Customer VALUES(2,'Jane Johnson','9876543210','F','jane@gmail.com','75094','Los Angeles','CA');
INSERT INTO Customer VALUES(3,'Micheal Lee','4567890123','M','micheal@gmail.com','12209','Chicago','IL');
INSERT INTO Customer VALUES(4,'Sarah Brown','7890123456','F','sarah@gmail.com','07008','Houston','TX');
INSERT INTO Customer VALUES(5,'David Kim','3456789012','M','david@gmail.com','94206','San Francisco','CA');
INSERT INTO Customer VALUES(6,'Jessica Chen','9012345678','F','jessica@gmail.com','80514','Miami','FL');
INSERT INTO Customer VALUES(7,'Brian Johnson','6789012345','M','brian@gmail.com','97954','Seattle','WA');
INSERT INTO Customer VALUES(8,'Emily Davis','2345678901','F','emily@gmail.com','96915','Atlanta','GA');
INSERT INTO Customer VALUES(9,'Matthew Wilson','5678901234','M','matthew@gmail.com','34620','Dallas','TX');
INSERT INTO Customer VALUES(10,'Olivia Anderson','8901234567','F','olivia@gmail.com','34646','Boston','MA');
INSERT INTO Customer VALUES(11,'James Taylor','1232345644','M','james@gmail.com','07508','San Diego','CA');
INSERT INTO Customer VALUES(12,'Ava Martinez','1238799032','F','ava@gmail.com','49015','Philadelphia','PA');
```

INSERT INTO Customer VALUES(13,'Benjamin Lee','2512346788','M','benjamin@gmail.com','17013','Phoenix','AZ');

INSERT INTO Customer VALUES(14,'Mia Brown','4347897689','F','mia@gmail.com','96744','Denver','CO');

INSERT INTO Customer VALUES(15,'Ethan Kim','3467542345','M','ethan@gmail.com','84403','Portland','OR');

Table Name: Customer Address (Sushmitha)

DROP TABLE Customer_Address CASCADE CONSTRAINTS;

CREATE TABLE Customer_Address

(

Customer_Id VARCHAR2(20) NOT NULL,

Customer_City VARCHAR2(20),

Customer_State VARCHAR2(30),

Customer_Zip VARCHAR2(20),

CONSTRAINT Customer_AddressPK PRIMARY KEY (Customer_Id),

CONSTRAINT Customer_AddressFK FOREIGN KEY (Customer_Id) REFERENCES Customer(Customer_Id)

);

Inserting values into Customer Address Table (Sushmitha)

INSERT INTO Customer_Address VALUES('1',' New York', 'NY', '91011');

INSERT INTO Customer_Address VALUES('2','Los Angeles','CA', '75094');

INSERT INTO Customer_Address VALUES('3','Chicago', 'IL', '12209');

INSERT INTO Customer_Address VALUES('4','Houston', 'TX', '07008');

INSERT INTO Customer_Address VALUES('5','San Francisco', 'CA', '94206');

INSERT INTO Customer_Address VALUES('6','Miami', 'FL', '80514');

INSERT INTO Customer_Address VALUES('7','Seattle', 'WA', '97954');

INSERT INTO Customer_Address VALUES('8','Atlanta', 'GA', '96915');

INSERT INTO Customer_Address VALUES('9','Dallas', 'TX', '34620');

INSERT INTO Customer_Address VALUES('10','Boston','MA', '34646');

INSERT INTO Customer_Address VALUES('11','San Diego','CA', '07508');

INSERT INTO Customer_Address VALUES('12','Philadelphia','PA', '49015');

INSERT INTO Customer_Address VALUES('13','Phoenix','AZ', '91011');

INSERT INTO Customer_Address VALUES('14','Denver','CO', '96744');

```
INSERT INTO Customer_Address VALUES('15','Portland','OR', '84403');
```

Table Name: Orders (Lohitha)

```
DROP TABLE Orders CASCADE CONSTRAINTS;
CREATE TABLE Orders
(
   Order_Id         NUMBER         NOT NULL,
   Order_Price      DECIMAL(10, 2),
   Order_Date       DATE,
   Order_Status     VARCHAR(20),
   Shipping_Address  VARCHAR(100),
   Employee_ID      NUMBER         NOT NULL,
   Customer_ID      VARCHAR2(20)         NOT NULL,
   CONSTRAINT ORDER_PK PRIMARY KEY (Order_Id),
   CONSTRAINT ORDER_FK1 FOREIGN KEY (Customer_ID) REFERENCES Customer(Customer_ID),
   CONSTRAINT ORDER_FK2 FOREIGN KEY (Employee_ID) REFERENCES Employee(Employee_ID)
);
```

Inserting values into Orders Table (Lohitha)

```
INSERT INTO ORDERS
VALUES  (1001, '150.99', '24 May 2022', 'Shipped', '1234 Elm St, NY', 101, 1);
INSERT INTO ORDERS
VALUES  (1002, '99.50', '25 May 2022', 'Delivered', '5678 Oak St, Los Angeles, CA',102, 2);
INSERT INTO ORDERS
VALUES  (1003, '200.00', '26 May 2022', 'Processing', '9101 Maple Ave, Chicago, IL',103, 3);
INSERT INTO ORDERS
VALUES  (1004, '75.25', '27 May 2022', 'Cancelled', '2468 Birch Rd, Houston, TX',104, 4);
INSERT INTO ORDERS
VALUES  (1005, '180.75', '3 June 2022', 'Shipped', '1357 Cedar Dr, Champaign, IL',103, 5);
INSERT INTO ORDERS
VALUES  (1006, '120.00', '15 June 2022', 'Delivered', '2468 Pine Ln, San Francisco, CA',102, 6);
INSERT INTO ORDERS
VALUES  (1007, '90.00', '27 June 2022', 'Processing', '7890 Willow Ct, Dallas, TX',202, 7);
```

```
INSERT INTO ORDERS
VALUES  (1008, '55.50', '9 July 2022', 'Shipped', '2345 Redwood Dr, Philadelphia, PA',102, 8);
INSERT INTO ORDERS
VALUES  (1009, '70.25', '20 July 2022', 'Delivered', '6789 Cedar Ct, Phoenix, AZ',201, 9);
INSERT INTO ORDERS
VALUES  (1010, '115.75', '15 August 2022', 'Shipped', '1234 Oakwood Ave, Peoria, IL',202, 10);
INSERT INTO ORDERS
VALUES  (1011, '200.50', '21 August 2022', 'Processing', '5678 Elmwood St, Denver, CO',203, 11);
INSERT INTO ORDERS
VALUES  (1012, '90.25', '28 August 2022', 'Cancelled', '9101 Maplewood Rd, Portland, OR',204, 12);
```

Table Name: Order Line (Lohitha)

```
DROP TABLE OrderLine CASCADE CONSTRAINTS;
CREATE TABLE OrderLine
(
OrderLine_Id VARCHAR(10) NOT NULL,
Order_Id number NOT NULL,
Product_Id VARCHAR(10) NOT NULL,
Ordered_Quantity NUMBER,
CONSTRAINT OrderLine_pk PRIMARY KEY (OrderLine_Id),
CONSTRAINT OrderLine_Orders_fk FOREIGN KEY (Order_ID) REFERENCES Orders (Order_ID),
CONSTRAINT Orders_Product_ID_fk FOREIGN KEY (Product_ID) REFERENCES Product (Product_ID));
```

Inserting values into Order LineTable (Lohitha)

```
INSERT INTO ORDERLINE
VALUES  ('OL1', '1001', 'M11', 2);
INSERT INTO ORDERLINE
VALUES  ('OL2', '1002', 'P22', 1);
INSERT INTO ORDERLINE
VALUES  ('OL3', '1003', 'P33', 4);
INSERT INTO ORDERLINE
VALUES  ('OL4', '1004', 'P55', 3);
```

```
INSERT INTO ORDERLINE
VALUES  ('OL5', '1005', 'M33', 1);
INSERT INTO ORDERLINE
VALUES  ('OL6', '1006', 'M55', 3);
INSERT INTO ORDERLINE
VALUES  ('OL7', '1007', 'M11', 1);
INSERT INTO ORDERLINE
VALUES  ('OL8', '1008', 'P55', 3);
INSERT INTO ORDERLINE
VALUES  ('OL9', '1009', 'P22', 2);
INSERT INTO ORDERLINE
VALUES  ('OL10', '1010', 'P33', 2);
INSERT INTO ORDERLINE
VALUES  ('OL11', '1011', 'P55', 3);
INSERT INTO ORDERLINE
VALUES  ('OL12', '1012', 'P22', 1);
```

Table Name: Employee_Address (Sushmitha)

```
DROP TABLE Employee_Address CASCADE CONSTRAINTS;
CREATE TABLE Employee_Address
(
   Employee_ID NUMBER NOT NULL,
   Employee_City VARCHAR2(50),
   Employee_State CHAR(2),
   Employee_Zip NUMBER(9),
   CONSTRAINT Employee_AddressPK PRIMARY KEY (Employee_ID),
   CONSTRAINT Employee_AddressFK FOREIGN KEY (Employee_ID) REFERENCES Employee(Employee_ID)
);
```

Inserting values into Employee Address Table (Sushmitha)

```
INSERT INTO Employee_Address VALUES (101, 'Pasadena', 'CA', 91011);
INSERT INTO Employee_Address VALUES (102, 'Pasadena', 'CA', 91011);
```

```
INSERT INTO Employee_Address VALUES (103, 'Pasadena', 'CA', 91011);

INSERT INTO Employee_Address VALUES (104,'Pasadena', 'CA', 91011);

INSERT INTO Employee_Address VALUES (201,'Pasadena', 'CA', 91011);

INSERT INTO Employee_Address VALUES (202,'Pasadena', 'CA', 91011);

INSERT INTO Employee_Address VALUES (203,'Pasadena', 'CA', 91011);


INSERT INTO Employee_Address VALUES (204,'Pasadena', 'CA', 91011);
```

Table Name: Supplier Address (Sushmitha)

```
DROP TABLE Supplier_Address CASCADE CONSTRAINTS;

CREATE TABLE Supplier_Address

(

   PProduct_ID VARCHAR2(30) NOT NULL,

   Supplier_City VARCHAR2(30),

   Supplier_State VARCHAR2(20),

   Supplier_Zip NUMBER(5) NOT NULL,

   CONSTRAINT Supplier_AddressPK PRIMARY KEY (PProduct_ID),

   CONSTRAINT Supplier_AddressFK FOREIGN KEY (PProduct_ID) REFERENCES Product(Product_ID)

);
```

Inserting values into Supplier Address Table (Sushmitha)

```
INSERT INTO Supplier_Address VALUES ('P22', 'Hartford', 'CT', 06002);

INSERT INTO Supplier_Address VALUES ('P33', 'Dover', 'DE', 19702);

INSERT INTO Supplier_Address VALUES ('P55', 'Atlanta', 'GA', 30003);
```

Table Name: Manufacturer Address (Sushmitha)

```
DROP TABLE Manufacturer_Address CASCADE CONSTRAINTS;

CREATE TABLE Manufacturer_Address

(

   MFProduct_ID VARCHAR2(10) NOT NULL,

   Manufacturer_City VARCHAR2(30),

   Manufacturer_State VARCHAR2(20),

   Manufacturer_Zip NUMBER(5) NOT NULL,
```

```
   CONSTRAINT Manufacturer_AddressPK PRIMARY KEY (MFProduct_ID),
   CONSTRAINT Manufacturer_AddressFK FOREIGN KEY (MFProduct_ID) REFERENCES Product(Product_ID)
);
```

Inserting values into Manufacturer Address Table (Sushmitha)

```
INSERT INTO Manufacturer_Address VALUES ('M11',' Montgomery', 'AL', 35004);
INSERT INTO Manufacturer_Address VALUES ('M33', 'Phoenix', 'AZ', 85002);
INSERT INTO Manufacturer_Address VALUES ('M55','Sacramento', 'CA', 90002);
```

Table Name: Employee (Navya)

```
DROP TABLE Employee CASCADE CONSTRAINTS;
CREATE TABLE Employee
(
Employee_ID NUMBER NOT NULL,
Employee_Name VARCHAR(25),
Employee_Phone NUMBER NOT NULL,
Employee_Email VARCHAR(25),
Employee_Designation VARCHAR(46),
Employee_gender VARCHAR(10),
Employee_Salary NUMBER NOT NULL,
Employee_city VARCHAR(50),
Employee_state CHAR(2),
Employee_Zip VARCHAR(9),
CONSTRAINT Employee_PK PRIMARY KEY (Employee_ID),
CONSTRAINT Employee_NN_Employee_Name CHECK (Employee_Name IS NOT NULL));
```

Inserting values into Employee Table (Navya)

```
INSERT INTO Employee VALUES(101,'Joe Gellar',655767 5557,'joe.g789@gmail.com','Manager','M',20000,'Pasadena','CA',91011);
INSERT INTO Employee VALUES(102,'Kat Pierce',8889990001,'Kat.p7256@gmail.com','Cashier','F',18000,'Pasadena','CA',91011);
INSERT INTO Employee VALUES(103,'Andrew
Bong',6667773546,'Andrew.b6468@gmail.com','Salesman','M',15000,'Pasadena','CA',91011);
INSERT INTO Employee VALUES(104,'Neha Rao',7810002647,'Neha.r186@gmail.com','Salesman','F',12000,'Pasadena','CA',91011);
INSERT INTO Employee VALUES(201,'Harry
Jones',7778537799,'Harry8647@gmail.com','Salesman','M',12000,'Pasadena','CA',91011);
```

INSERT INTO Employee VALUES(202,'Vera Moon',6567652577,'Vera.m1254@gmail.com','Salesman','F',14000,'Pasadena','CA',91011);

INSERT INTO Employee VALUES(203,'Yan Chang',2576547998,'Yan.C5432@gmail.com','Salesman','F',11000,'Pasadena','CA',91011);

INSERT INTO Employee VALUES(204,'Shyam Singh',6748764676,'Shyam.s6371@gmail.com','Salesman','M',10000,'Pasadena','CA',91011);

Table Name: Product (Navya)

```
DROP TABLE Product CASCADE CONSTRAINTS;

CREATE TABLE Product

(

Product_ID VARCHAR(10) NOT NULL,

Product_Name VARCHAR(30) NOT NULL,

Product_Type VARCHAR(50) NOT NULL,

Product_Price FLOAT,

Product_Color VARCHAR(15),

Product_Size Number(5),

Product_Warranty VARCHAR(30),

Product_Brand VARCHAR(30),

Product_Quantity VARCHAR(30) NOT NULL,

CONSTRAINT Product_ID_pk PRIMARY KEY (Product_ID));
```

Inserting values into Product (Navya)

```
INSERT INTO Product VALUES('M11','Sneakers','Manufactured',100,'White',7,'24months','Nike',300);

INSERT INTO Product VALUES('P22','Heels','Purchased',150,'Black',7.5,'6months','ALDO',150);

INSERT INTO Product VALUES('P33','HikingShoes','Purchased',220,'Red',6.5,'12months','Adidas',230);

INSERT INTO Product VALUES('M33','Flipflops','Manufactured',30,'Pink',6,'6months','Splash',200);

INSERT INTO Product VALUES('M55','SportShoes','Manufactured',60,'Orange',7,'18months','abc',180);

INSERT INTO Product VALUES('P55','Loafers','Purchased',70,'Brown',7.5,'12months','SteveMadden',250);
```

Table Name: Purchased Product (Navya)

```
DROP TABLE Purchased_Product CASCADE CONSTRAINTS;

CREATE TABLE Purchased_Product

(
```

```
PProduct_ID VARCHAR(30),

Supplier_Name VARCHAR(30) NOT NULL,

Supplier_Email VARCHAR(30),

Supplier_Phone NUMBER(10),

Supplier_City VARCHAR(20),

Supplier_State VARCHAR(2),


Supplier_Zip VARCHAR(9),

Purchased_quantity number(11) NOT NULL,

CONSTRAINT Purchased_Product_PK PRIMARY KEY (PProduct_ID),

CONSTRAINT Purchased_Product_FK FOREIGN KEY (PProduct_ID) REFERENCES Product(Product_ID));
```

Inserting values into Purchased Product Table (Navya)

```
INSERT INTO Purchased_Product VALUES('P11','Nike','firstchoice7537@gmail.com',5673464565,'Denver','Connecticut',80002,200);

INSERT INTO Purchased_Product VALUES('P22','New Balance','edmsupplies1242@gmail.com',6444677537,'Hartford','CT',6002,150);

INSERT INTO Purchased_Product VALUES('P33','NuSouce Inc','Fastenal6821@gmail.com',8566434668,'Dover','DE',19702,230);

INSERT INTO Purchased_Product VALUES('P44','Reebok International
Ltd','aci.intl1324@gmail.com',6457633587,'Tallahassee','FL',32004,280);

INSERT INTO Purchased_Product VALUES('P55','NY Wholesale','nywhole4576@gmail.com',3797435678,'Atlanta','GA',30003,250);
```

Table Name: Manufactured Product (Navya)

```
DROP TABLE Manufactured_Product CASCADE CONSTRAINTS;

CREATE TABLE Manufactured_Product

(

MFProduct_ID VARCHAR(30),

Manufacturer_Name VARCHAR(30) NOT NULL,

Manufacturer_State VARCHAR(2),

Manufacturer_City VARCHAR(20),

Manufacturer_Zip VARCHAR(9),

Manufacturer_Quantity NUMBER(11) Not Null,

CONSTRAINT Manufactured_Product_PK PRIMARY KEY (MFProduct_ID),

CONSTRAINT Manufactured_Product_FK FOREIGN KEY (MFProduct_ID)  REFERENCES Product(Product_ID));
```

Inserting values into Manufactured Product Table (Navya)

INSERT INTO Manufactured_Product VALUES('M11','ABCManfacturersLtd','CA','Pasadena',91011,300);

INSERT INTO Manufactured_Product VALUES('M22','ABCManfacturersLtd','CA','Pasadena',91011,240);

INSERT INTO Manufactured_Product VALUES('M33','ABCManfacturersLtd','CA','Pasadena',91011,200);

INSERT INTO Manufactured_Product VALUES('M44','ABCManfacturersLtd','CA','Pasadena',91011,150);

INSERT INTO Manufactured_Product VALUES('M55','ABCManfacturersLtd','CA','Pasadena',91011,180);

Describing Tables

Desc Customer; (Lohitha)

```
Desc Customer;
```

Script Output

Task completed in 0.026 seconds

```
Name            Null?    Type
--------------- -------- -------------
CUSTOMER_ID     NOT NULL VARCHAR2(20)
CUSTOMER_NAME            VARCHAR2(25)
CUSTOMER_PHONE           CHAR(10)
CUSTOMER_GENDER          CHAR(20)
CUSTOMER_EMAIL           VARCHAR2(100)
CUSTOMER_ZIP             VARCHAR2(5)
CUSTOMER_CITY            VARCHAR2(50)
CUSTOMER_STATE           CHAR(2)
```

Desc ORDERS; (Lohitha)

```
desc ORDERS;
```

Script Output | Query Result

Task completed in 0.325 seconds

```
12 rows selected.

Name                Null?    Type
----------------- -------- -------------
ORDER_ID            NOT NULL NUMBER
ORDER_PRICE                  NUMBER(10,2)
ORDER_DATE                   DATE
ORDER_STATUS                 VARCHAR2(20)
SHIPPING_ADDRESS             VARCHAR2(100)
EMPLOYEE_ID         NOT NULL NUMBER
CUSTOMER_ID         NOT NULL VARCHAR2(20)
```

DESC ORDERLINE; (Lohitha)

```
DESC ORDERLINE;
```

Script Output

Task completed in 0.32 seconds

```
12 rows selected.

Name                Null?    Type
----------------- -------- ------------
ORDERLINE_ID        NOT NULL VARCHAR2(10)
ORDER_ID            NOT NULL NUMBER
PRODUCT_ID          NOT NULL VARCHAR2(10)
ORDERED_QUANTITY             NUMBER
```

Desc Employee; (Navya)

```
Desc Employee;
```

Script Output

Task completed in 0.107 seconds

```
1 row inserted.


1 row inserted.


1 row inserted.

Name                   Null?    Type
---------------------- -------- ------------
EMPLOYEE_ID            NOT NULL NUMBER
EMPLOYEE_NAME                   VARCHAR2(25)
EMPLOYEE_PHONE         NOT NULL NUMBER
EMPLOYEE_EMAIL                  VARCHAR2(25)
EMPLOYEE_DESIGNATION            VARCHAR2(46)
EMPLOYEE_GENDER                 VARCHAR2(10)
EMPLOYEE_SALARY        NOT NULL NUMBER
EMPLOYEE_CITY                   VARCHAR2(50)
EMPLOYEE_STATE                  CHAR(2)
EMPLOYEE_ZIP                    VARCHAR2(9)
```

DESC PRODUCT; (Navya)

```
DESC PRODUCT;
```

Script Output | Query Result

Task completed in 0.323 seconds

```
Name              Null?    Type
----------------- -------- ------------
PRODUCT_ID        NOT NULL VARCHAR2(10)
PRODUCT_NAME      NOT NULL VARCHAR2(30)
PRODUCT_TYPE      NOT NULL VARCHAR2(50)
PRODUCT_PRICE              FLOAT(126)
PRODUCT_COLOR              VARCHAR2(15)
PRODUCT_SIZE               NUMBER(5)
PRODUCT_WARRANTY           VARCHAR2(30)
PRODUCT_BRAND              VARCHAR2(30)
PRODUCT_QUANTITY NOT NULL VARCHAR2(30)
```

Desc Purchased_Product; (Navya)

```
desc PURCHASED_PRODUCT;
```

Script Output

Task completed in 0.324 seconds

```
Name                 Null?    Type
-------------------- -------- ------------
PPRODUCT_ID          NOT NULL VARCHAR2(30)
SUPPLIER_NAME        NOT NULL VARCHAR2(30)
SUPPLIER_EMAIL                VARCHAR2(30)
SUPPLIER_PHONE                NUMBER(10)
SUPPLIER_CITY                 VARCHAR2(20)
SUPPLIER_STATE                VARCHAR2(2)
SUPPLIER_ZIP                  VARCHAR2(9)
PURCHASED_QUANTITY NOT NULL NUMBER(11)
```

Desc Manufactured_Product; (Navya)

```
DESC MANUFACTURED_PRODUCT;
```

Script Output

Task completed in 0.32 seconds

```
Name                     Null?    Type
------------------------ -------- ------------
MFPRODUCT_ID             NOT NULL VARCHAR2(30)
MANUFACTURER_NAME        NOT NULL VARCHAR2(30)
MANUFACTURER_STATE                VARCHAR2(2)
MANUFACTURER_CITY                 VARCHAR2(20)
MANUFACTURER_ZIP                  VARCHAR2(9)
MANUFACTURER_QUANTITY NOT NULL NUMBER(11)
```

Desc Customer_Address; (Sushmitha)

```
DESC Customer_Address;
```

Script Output | Query Result

Task completed in 0.039 seconds

```
Name            Null?    Type
--------------- -------- ------------
CUSTOMER_ID     NOT NULL VARCHAR2(20)
CUSTOMER_CITY            VARCHAR2(20)
CUSTOMER_STATE           VARCHAR2(30)
CUSTOMER_ZIP             VARCHAR2(20)
```

Desc Supplier_Address; (Sushmitha)

```
desc supplier_address;
```

Script Output

Task completed in 0.318 seconds

```
P33                                Dover
P55                                Atlanta

Name            Null?    Type
--------------- -------- ------------
PPRODUCT_ID     NOT NULL VARCHAR2(30)
SUPPLIER_CITY            VARCHAR2(30)
SUPPLIER_STATE           VARCHAR2(20)
SUPPLIER_ZIP    NOT NULL NUMBER(5)
```

Desc Employee_Address; (Sushmitha)

```
desc Employee_Address;
```

Script Output

Task completed in 0.322 seconds

```
Name            Null?    Type
--------------- -------- ------------
EMPLOYEE_ID     NOT NULL NUMBER
EMPLOYEE_CITY            VARCHAR2(50)
EMPLOYEE_STATE           CHAR(2)
EMPLOYEE_ZIP             NUMBER(9)
```

Desc Manufacturer_Address; (Sushmitha)

```
desc Manufacturer_Address;
```

Script Output

Task completed in 0.329 seconds

```
M33         Phoenix                        AZ
M55         Sacramento                     CA

Name                 Null?    Type
-------------------- -------- ------------
MFPRODUCT_ID         NOT NULL VARCHAR2(10)
MANUFACTURER_CITY             VARCHAR2(30)
MANUFACTURER_STATE            VARCHAR2(20)
MANUFACTURER_ZIP     NOT NULL NUMBER(5)
```

Selecting All from Tables:

SELECT * FROM Customer; (Lohitha)

```
select * from Customer;
```

Script Output × Query Result ×

SQL | All Rows Fetched: 15 in 0.032 seconds

	CUSTOMER_ID	CUSTOMER_NAME	CUSTOMER_PHONE	CUSTOMER_GENDER	CUSTOMER_EMAIL	CUSTOMER_ZIP	CUSTOMER_CITY	CUSTOMER_STATE
1	1	John Smith	1234567890	M	john@gmail.com	32601	New York	NY
2	2	Jane Johnson	9876543210	F	jane@gmail.com	75094	Los Angeles	CA
3	3	Micheal Lee	4567890123	M	micheal@gmail.com	12209	Chicago	IL
4	4	Sarah Brown	7890123456	F	sarah@gmail.com	07008	Houston	TX
5	5	David Kim	3456789012	M	david@gmail.com	94206	San Francisco	CA
6	6	Jessica Chen	9012345678	F	jessica@gmail.com	80514	Miami	FL
7	7	Brian Johnson	6789012345	M	brian@gmail.com	97954	Seattle	WA
8	8	Emily Davis	2345678901	F	emily@gmail.com	96915	Atlanta	GA
9	9	Matthew Wilson	5678901234	M	matthew@gmail.com	34620	Dallas	TX
10	10	Olivia Anderson	8901234567	F	olivia@gmail.com	34646	Boston	MA
11	11	James Taylor	1232345644	M	james@gmail.com	07508	San Diego	CA
12	12	Ava Martinez	1238799032	F	ava@gmail.com	49015	Philadelphia	PA
13	13	Benjamin Lee	2512346788	M	benjamin@gmail.com	17013	Phoenix	AZ
14	14	Mia Brown	4347897689	F	mia@gmail.com	96744	Denver	CO
15	15	Ethan Kim	3467542345	M	ethan@gmail.com	84403	Portland	OR

SELECT * FROM Orders; (Lohitha)

SQL Worksheet History

0.035 seconds

Worksheet Query Builder

```
select * from ORDERS;
```

Script Output × Query Result ×

Task completed in 0.035 seconds

```
 ORDER_ID ORDER_PRICE ORDER_DAT ORDER_STATUS         SHIPPING_ADDRESS
---------- ----------- --------- -------------------- ----------------------------------------------------------------
     1001      150.99 24-MAY-22 Shipped              1234 Elm St, NY
     1002        99.5 25-MAY-22 Delivered            5678 Oak St, Los Angeles, CA
     1003         200 26-MAY-22 Processing           9101 Maple Ave, Chicago, IL
     1004       75.25 27-MAY-22 Cancelled            2468 Birch Rd, Houston, TX
     1005      180.75 03-JUN-22 Shipped              1357 Cedar Dr, Champaign, IL
     1006         120 15-JUN-22 Delivered            2468 Pine Ln, San Francisco, CA
     1007          90 27-JUN-22 Processing           7890 Willow Ct, Dallas, TX
     1008        55.5 09-JUL-22 Shipped              2345 Redwood Dr, Philadelphia, PA
     1009       70.25 20-JUL-22 Delivered            6789 Cedar Ct, Phoenix, AZ
     1010      115.75 15-AUG-22 Shipped              1234 Oakwood Ave, Peoria, IL
     1011       200.5 21-AUG-22 Processing           5678 Elmwood St, Denver, CO

 ORDER_ID ORDER_PRICE ORDER_DAT ORDER_STATUS         SHIPPING_ADDRESS
---------- ----------- --------- -------------------- ----------------------------------------------------------------
     1012       90.25 28-AUG-22 Cancelled            9101 Maplewood Rd, Portland, OR
```

SELECT * FROM OrderLine; (Lohitha)

```
select * from ORDERLINE;
```

Script Output

Task completed in 0.025 seconds

ORDERLINE_	ORDER_ID	PRODUCT_ID	ORDERED_QUANTITY
OL2	1002	P22	1
OL4	1004	P55	3
OL5	1005	P33	1
OL6	1006	P22	3
OL8	1008	P55	3
OL10	1010	P33	2
OL1	1001	M11	2
OL3	1003	P33	4
OL7	1007	M11	1
OL9	1009	P22	2
OL11	1011	P55	3

ORDERLINE_	ORDER_ID	PRODUCT_ID	ORDERED_QUANTITY
OL12	1012	P22	1

SELECT * FROM Employee; (Navya)

```
SELECT * FROM Employee;
```

Script Output

Task completed in 0.023 seconds

EMPLOYEE_ID	EMPLOYEE_NAME	EMPLOYEE_PHONE	EMPLOYEE_EMAIL	EMPLOYEE_DESIGNATION	EMPLOYEE_G	EMPLOYEE_
102	Kat Pierce	8889990001	Kat.p7256@gmail.com	Cashier	F	
103	Andrew Bong	6667773546	Andrew.b6468@gmail.com	Salesman	M	
104	Neha Rao	7810002647	Neha.r186@gmail.com	Salesman	F	
201	Harry Jones	7778537799	Harry8647@gmail.com	Salesman	M	
202	Vera Moon	6567652577	Vera.m1254@gmail.com	Salesman	F	
203	Yan Chang	2576547998	Yan.C5432@gmail.com	Salesman	F	
204	Shyam Singh	6748764676	Shyam.s6371@gmail.com	Salesman	M	
101	Joe Gellar	6557675557	joe.g789@gmail.com	Manager	M	

8 rows selected.

SELECT * FROM Product; (Navya)

```
select * from PRODUCT;
```

Script Output | Query Result

Task completed in 0.018 seconds

PRODUCT_ID	PRODUCT_NAME	PRODUCT_TYPE	PRODUCT_PRICE	PRODUCT_COLOR	PRODUCT_SIZE	PRODUCT_WA
M11	Sneakers	Manufactured	100	White	7	24months
P22	Heels	Purchased	150	Black	8	6months
P33	HikingShoes	Purchased	220	Red	7	12months
M33	Flipflops	Manufactured	30	Pink	6	6months
M55	SportShoes	Manufactured	60	Orange	7	18months
P55	Loafers	Purchased	70	Brown	8	12months

6 rows selected.

SELECT * FROM Purchased_Product; (Navya)

```
select * FROM PURCHASED_PRODUCT;
Script Output
Task completed in 0.027 seconds

PPRODUCT_ID   SUPPLIER_NAME   SUPPLIER_EMAIL          SUPPLIER_PHONE SUPPLIER_CITY   SU SUPPLIER_ PURC
------------ --------------- ----------------------- -------------- --------------- -- --------- ----
P22           New Balance     edmsupplies1242@gmail.com  6444677537 Hartford        CT 6002
P33           NuSouce Inc     Fastenal6821@gmail.com     8566434668 Dover           DE 19702
P55           NY Wholesale    nywhole4576@gmail.com      3797435678 Atlanta         GA 30003
```

SELECT * FROM Manufactured_Product; (Navya)

```
SELECT * FROM MANUFACTURED_PRODUCT;
Script Output
Task completed in 0.024 seconds

MFPRODUCT_ID   MANUFACTURER_NAME   MA MANUFACTURER_CITY   MANUFACTU MANUFACTURER_QUANTITY
------------ ------------------- -- ------------------- --------- ----------------------
M11            ABCManfacturersLtd  CA Pasadena            91011                      300
M33            ABCManfacturersLtd  CA Pasadena            91011                      200
M55            ABCManfacturersLtd  CA Pasadena            91011                      180
```

SELECT * FROM Customer_Address; (Sushmitha)

```
SELECT * FROM Customer_Address;
Script Output   Query Result
SQL | All Rows Fetched: 15 in 0.046 seconds
```

	CUSTOMER_ID	CUSTOMER_CITY	CUSTOMER_STATE	CUSTOMER_ZIP
1	1	New York	NY	91011
2	2	Los Angeles	CA	75094
3	3	Chicago	IL	12209
4	4	Houston	TX	7008
5	5	San Francisco	CA	94206
6	6	Miami	FL	80514
7	7	Seattle	WA	97954
8	8	Atlanta	GA	96915
9	9	Dallas	TX	34620
10	10	Boston	MA	34646
11	11	San Diego	CA	7508
12	12	Philadelphia	PA	49015
13	13	Phoenix	AZ	91011
14	14	Denver	CO	96744
15	15	Portland	OR	84403

SELECT * FROM Supplier Address; (Sushmitha)

```
select * from supplier_address;

Script Output
Task completed in 0.02 seconds
1 row inserted.

PPRODUCT_ID                    SUPPLIER_CITY                  SUPPLIER_STATE       SUPPLIER_ZIP
------------------------------ ------------------------------ -------------------- ------------
P22                            Hartford                       CT                           6002
P33                            Dover                          DE                          19702
P55                            Atlanta                        GA                          30003
```

SELECT * FROM Employee_Address; (Sushmitha)

```
select * from Employee_Address;

Script Output
Task completed in 0.023 seconds
1 row inserted.

EMPLOYEE_ID EMPLOYEE_CITY                                      EM EMPLOYEE_ZIP
----------- -------------------------------------------------- -- ------------
        101  Pasadena                                          CA        91011
        102 Pasadena                                           CA        91011
        103 Pasadena                                           CA        91011
        104 Pasadena                                           CA        91011
        201 Pasadena                                           CA        91011
        202 Pasadena                                           CA        91011
        203 Pasadena                                           CA        91011
        204 Pasadena                                           CA        91011

8 rows selected.
```

SELECT * FROM Manufacturer_Address; (Sushmitha)

```
select * from Manufacturer_Address;

Script Output
Task completed in 0.018 seconds
1 row inserted.

MFPRODUCT_ MANUFACTURER_CITY              MANUFACTURER_STATE   MANUFACTURER_ZIP
---------- ------------------------------ -------------------- ----------------
M11         Montgomery                    AL                              35004
M33        Phoenix                        AZ                              85002
M55        Sacramento                     CA                              90002
```

Performing Insert, Update, Delete, Create Views

INSERT values:

Inserting records to Employee Table (Lohitha)

INSERT INTO Employee
VALUES(105,'Messie',8889992345,'Messie.123@gmail.com','Cashier','M',28000,'Pasadena','CA',91011);

INSERT INTO Employee
VALUES(205,'Christina',6667777645,'Christina.46@gmail.com','Salesman','F',17000,'Pasadena','CA',91011);

```
select * from employee;
```

Script Output

Task completed in 0.023 seconds

```
1 row inserted.


EMPLOYEE_ID EMPLOYEE_NAME             EMPLOYEE_PHONE EMPLOYEE_EMAIL            EMPLOYEE_DESIGNATION                          EMPLOYEE_G EMPLOYEE_
----------- ------------------------- -------------- ------------------------- --------------------------------------------- ---------- ---------
        101 Joe Gellar                    6557675557 joe.g789@gmail.com        Manager                                       M
        102 Kat Pierce                    8889990001 Kat.p7256@gmail.com       Cashier                                       F
        103 Andrew Bong                   6667773546 Andrew.b6468@gmail.com    Salesman                                      M
        104 Neha Rao                      7810002647 Neha.r186@gmail.com       Salesman                                      F
        201 Harry Jones                   7778537799 Harry8647@gmail.com       Salesman                                      M
        202 Vera Moon                     6567652577 Vera.m1254@gmail.com      Salesman                                      F
        203 Yan Chang                     2576547998 Yan.C5432@gmail.com       Salesman                                      F
        204 Shyam Singh                   6748764676 Shyam.s6371@gmail.com     Salesman                                      M
        105 Messie                        8889992345 Messie.123@gmail.com      Cashier                                       M
        205 Christina                     6667777645 Christina.46@gmail.com    Salesman                                      F

10 rows selected.
```

Inserting records to Customer Table (Sushmitha)

INSERT INTO Customer VALUES(16,'Mark','5762348900','M','Mark@gmail.com','32691','Dallas','TX');
INSERT INTO Customer VALUES(17,'Marie','7768148900','F','Marie222@gmail.com','34311','Sacramento','CA');

Script Output × Query Result ×

SQL | All Rows Fetched: 17 in 0.044 seconds

	CUSTOMER_ID	CUSTOMER_NAME	CUSTOMER_PHONE	CUSTOMER_GENDER	CUSTOMER_EMAIL	CUSTOMER_ZIP	CUSTOMER_CITY	CUSTOMER_STATE
1	1	John Smith	1234567890	M	john@gmail.com	32601	New York	NY
2	2	Jane Johnson	9876543210	F	jane@gmail.com	75094	Los Angeles	CA
3	3	Micheal Lee	4567890123	M	micheal@gmail.com	12209	Chicago	IL
4	4	Sarah Brown	7890123456	F	sarah@gmail.com	07008	Houston	TX
5	5	David Kim	3456789012	M	david@gmail.com	94206	San Francisco	CA
6	6	Jessica Chen	9012345678	F	jessica@gmail.com	80514	Miami	FL
7	7	Brian Johnson	6789012345	M	brian@gmail.com	97954	Seattle	WA
8	8	Emily Davis	2345678901	F	emily@gmail.com	96915	Atlanta	GA
9	9	Matthew Wilson	5678901234	M	matthew@gmail.com	34620	Dallas	TX
10	10	Olivia Anderson	8901234567	F	olivia@gmail.com	34646	Boston	MA
11	11	James Taylor	1232345644	M	james@gmail.com	07508	San Diego	CA
12	12	Ava Martinez	1238799032	F	ava@gmail.com	49015	Philadelphia	PA
13	13	Benjamin Lee	2512346788	M	benjamin@gmail.com	17013	Phoenix	AZ
14	14	Mia Brown	4347897689	F	mia@gmail.com	96744	Denver	CO
15	15	Ethan Kim	3467542345	M	ethan@gmail.com	84403	Portland	OR
16	16	Mark	5762348900	M	Mark@gmail.com	32691	Dallas	TX
17	17	Marie	7768148900	F	Marie222@gmail.com	34311	Sacramento	CA

Inserting records to Product Table (Navya)

INSERT INTO Product VALUES('P11','Jordans','Purchased',120,'Green',7,'24 months','Nike',100);
INSERT INTO Product VALUES('M22','Office Shoes','Manufactured',80,'Cream',7.5,'12 months','xyz',80);

```
select * from product;
```

Script Output ×

Task completed in 0.019 seconds

```
1 row inserted.


PRODUCT_ID PRODUCT_NAME                   PRODUCT_TYPE                                       PRODUCT_PRICE PRODUCT_COLOR   PRODUCT_SIZE PRODUCT_WA
---------- ------------------------------ -------------------------------------------------- ------------- --------------- ------------ ----------
M11        Sneakers                       Manufactured                                                 100 White                        7 24months
P22        Heels                          Purchased                                                    150 Black                        8 6months
P33        HikingShoes                    Purchased                                                    220 Red                          7 12months
M33        Flipflops                      Manufactured                                                  30 Pink                         6 6months
M55        SportShoes                     Manufactured                                                  60 Orange                       7 18months
P55        Loafers                        Purchased                                                     70 Brown                        8 12months
P11        Jordans                        Purchased                                                    120 Green                        7 24 months
M22        Office Shoes                   Manufactured                                                  80 Cream                        8 12 months

8 rows selected.
```

UPDATE values: (Navya)

Updating Product_Name from Flipflops to Wedges in Product Table.

Change the Product FlipFlops to Wedges

UPDATE product

SET Product_Name = 'Wedges'

WHERE Product_Name = 'Flipflops';

```
Change the Product FlipFlops to Wedges
UPDATE product
SET Product_Name = 'Wedges'
WHERE Product_Name = 'Flipflops';

select * from product;
```

Script Output

Task completed in 0.02 seconds

```
1 row updated.


PRODUCT_ID PRODUCT_NAME                    PRODUCT_TYPE                                    PRODUCT_PRICE PRODUCT_COLOR   PRODUCT_SIZE PRODUCT_WA
---------- ------------------------------- ------------------------------------------------ ------------- --------------- ------------ ----------
M11        Sneakers                        Manufactured                                               100 White                        7 24months
P22        Heels                           Purchased                                                  150 Black                        8 6months
P33        HikingShoes                     Purchased                                                  220 Red                          7 12months
M33        Wedges                          Manufactured                                                30 Pink                         6 6months
M55        SportShoes                      Manufactured                                                60 Orange                       7 18months
P55        Loafers                         Purchased                                                   70 Brown                        8 12months
P11        Jordans                         Purchased                                                  120 Green                        7 24 months
M22        Office Shoes                    Manufactured                                                80 Cream                        8 12 months

8 rows selected.
```

DELETE values: (Lohitha)

Deleting OL2 values from OrderLine Table.

DELETE from OrderLine where OrderLine_ID = 'OL2';

```
DELETE from OrderLine where OrderLine_ID = 'OL2';

select * from OrderLine;
```

Script Output

Task completed in 0.025 seconds

```
1 row deleted.


ORDERLINE_   ORDER_ID PRODUCT_ID ORDERED_QUANTITY
---------- ---------- ---------- ----------------
OL4              1004 P55                       3
OL5              1005 P33                       1
OL6              1006 P22                       3
OL8              1008 P55                       3
OL10             1010 P33                       2
OL1              1001 M11                       2
OL3              1003 P33                       4
OL7              1007 M11                       1
OL9              1009 P22                       2
OL11             1011 P55                       3
OL12             1012 P22                       1
```

CREATE VIEW: (Sushmitha)

Creating a view for Customer in states California and Texas:

CREATE OR REPLACE VIEW CA_TX_Vu AS SELECT customer_name, customer_state FROM customer WHERE customer_state IN ('CA', 'TX');

SELECT * FROM CA_TX_Vu;

```
CREATE OR REPLACE VIEW CA_TX_Vu AS SELECT customer_name, customer_state FROM customer WHERE customer_state IN ('CA', 'TX') ;

SELECT * FROM CA_TX_Vu;
```

Script Output

Task completed in 0.024 seconds

```
CUSTOMER_NAME              CU
------------------------- --
Jane Johnson               CA
Sarah Brown                TX
David Kim                  CA
Matthew Wilson             TX
James Taylor               CA
Mark                       TX
Marie                      CA

7 rows selected.
```

Testing Database with (Select, join, where, group by, having) Queries

What are the product IDs, names, and total counts of products manufactured by Nike, based on the Manufactured_Product and Product tables? (Navya)

SELECT

Product_Id,

Product_Name,

COUNT(*) as Product_count

FROM

Manufactured_Product

INNER JOIN

Product

ON

Manufactured_Product.MFProduct_ID = Product.Product_ID

GROUP BY

Product_Id,

Product_Name

HAVING

MAX(Product_Brand) = 'Nike';

```
SELECT
    Product_Id,
    Product_Name,
    COUNT(*) as Product_count
FROM
    Manufactured_Product
INNER JOIN
    Product
ON
    Manufactured_Product.MFProduct_ID = Product.Product_ID
GROUP BY
    Product_Id,
    Product_Name
HAVING
    MAX(Product_Brand) = 'Nike';
```

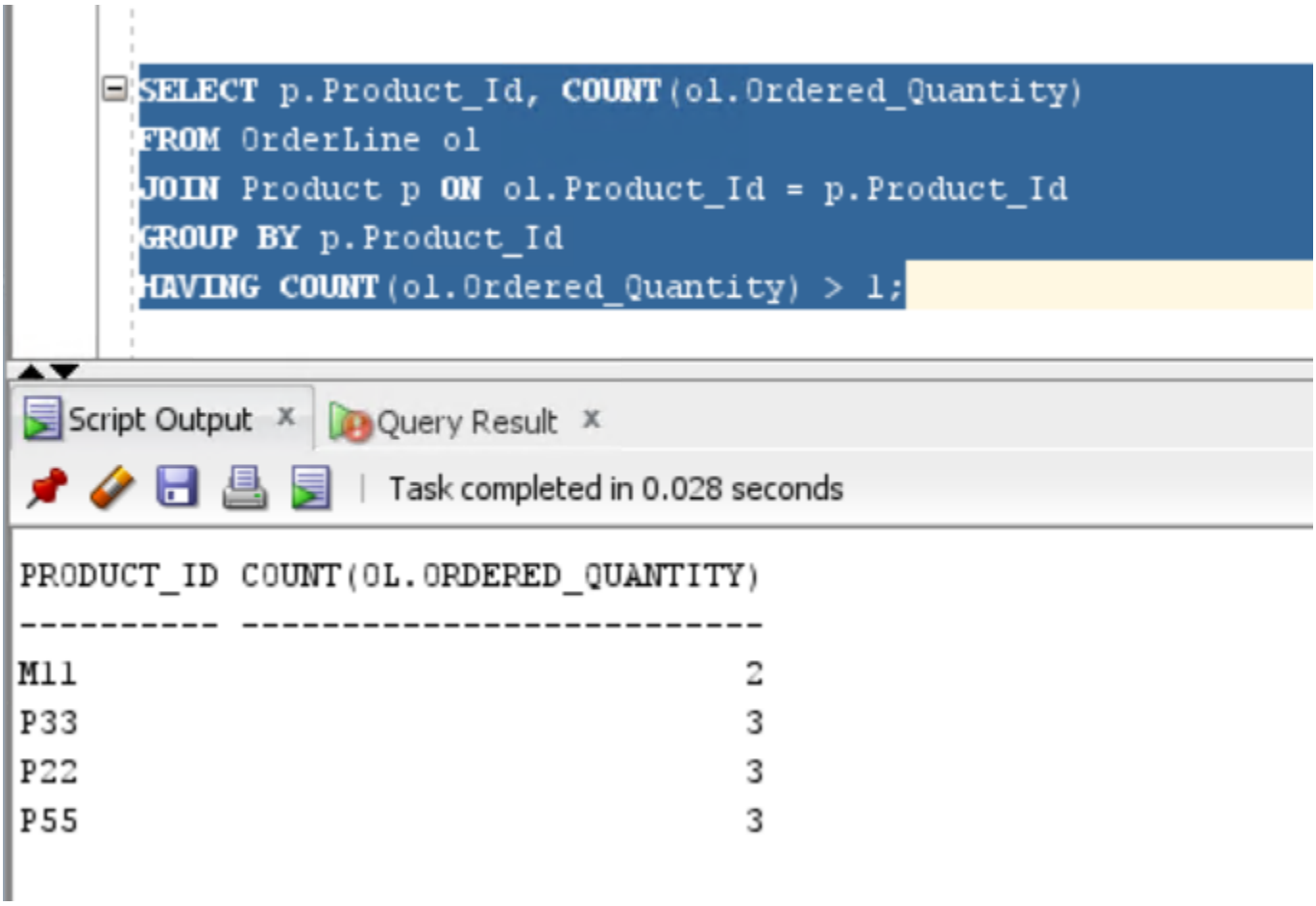
Script Output x Query Result x

Task completed in 0.016 seconds

```
PRODUCT_ID PRODUCT_NAME                    PRODUCT_COUNT
---------- ------------------------------ -------------
M11        Sneakers                                   1
```

Display Product IDs with more than 1 order. (Sushmitha)

```
SELECT p.Product_Id, COUNT(ol.Ordered_Quantity)
FROM OrderLine ol
JOIN Product p ON ol.Product_Id = p.Product_Id
GROUP BY p.Product_Id
HAVING COUNT(ol.Ordered_Quantity) > 1;
```



What is the list of male employees and their contact information along with their corresponding addresses? (Lohitha)

```
SELECT
   E.EMPLOYEE_NAME,
   E.EMPLOYEE_PHONE,
   E.EMPLOYEE_DESIGNATION,
   E.EMPLOYEE_STATE,
   E.EMPLOYEE_CITY,
   E.EMPLOYEE_ZIP
FROM
   EMPLOYEE E
RIGHT JOIN
   EMPLOYEE_ADDRESS EA ON E.EMPLOYEE_ID = EA.EMPLOYEE_ID
WHERE
   E.EMPLOYEE_GENDER = 'M'
GROUP BY
   E.EMPLOYEE_NAME,
   E.EMPLOYEE_PHONE,
   E.EMPLOYEE_DESIGNATION,
   E.EMPLOYEE_STATE,
   E.EMPLOYEE_CITY,
   E.EMPLOYEE_ZIP
HAVING
   COUNT(*) > 0;
```

```
RIGHT JOIN
    EMPLOYEE_ADDRESS EA ON E.EMPLOYEE_ID = EA.EMPLOYEE_ID
WHERE
    E.EMPLOYEE_GENDER = 'M'
GROUP BY
    E.EMPLOYEE_NAME,
    E.EMPLOYEE_PHONE,
    E.EMPLOYEE_DESIGNATION,
    E.EMPLOYEE_STATE,
    E.EMPLOYEE_CITY,
    E.EMPLOYEE_ZIP
HAVING
    COUNT(*) > 0;
```

Script Output | Query Result

Task completed in 0.025 seconds

EMPLOYEE_NAME	EMPLOYEE_PHONE	EMPLOYEE_DESIGNATION	EM	EMPLOYEE_CITY	EMPL
Shyam Singh	6748764676	Salesman	CA	Pasadena	9101
Joe Gellar	6557675557	Manager	CA	Pasadena	9101
Andrew Bong	6667773546	Salesman	CA	Pasadena	9101
Harry Jones	7778537799	Salesman	CA	Pasadena	9101

PL/SQL

Raise Employee Salary by 5%

```
CREATE OR REPLACE PROCEDURE raise_Employee_Salary
  (v_id in Employee.Employee_ID%type)
  IS
  BEGIN
  UPDATE Employee
  SET Employee_Salary = Employee_Salary*1.05
  WHERE Employee_ID = v_id;
  END raise_Employee_Salary;
```

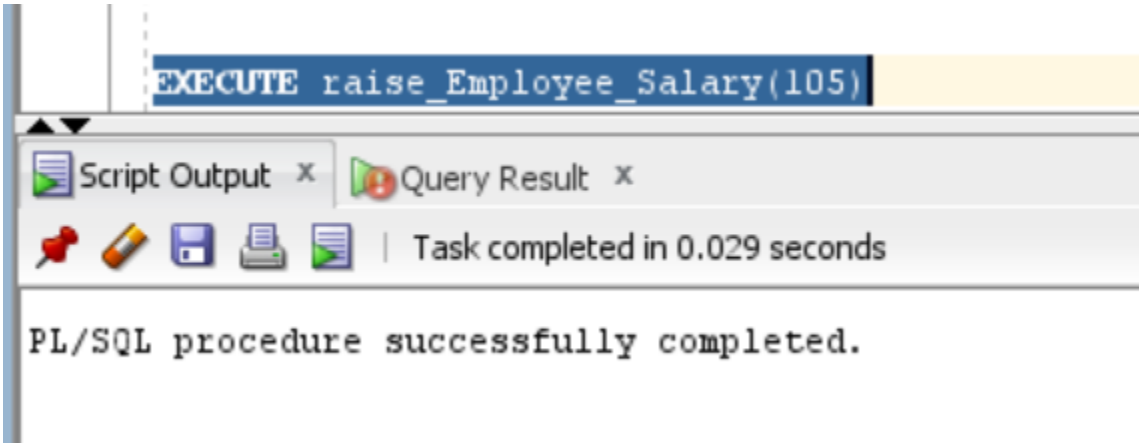
```
CREATE OR REPLACE PROCEDURE raise_Employee_Salary
   (v_id in Employee.Employee_ID%type)
   IS
   BEGIN
   UPDATE Employee
   SET Employee_Salary = Employee_Salary*1.05
   WHERE Employee_ID = v_id;
   END raise_Employee_Salary;

EXECUTE raise_Employee_Salary(105)

select * from Employee
WHERE employee_ID = 105;
```

Script Output | Query Result

Task completed in 0.019 seconds

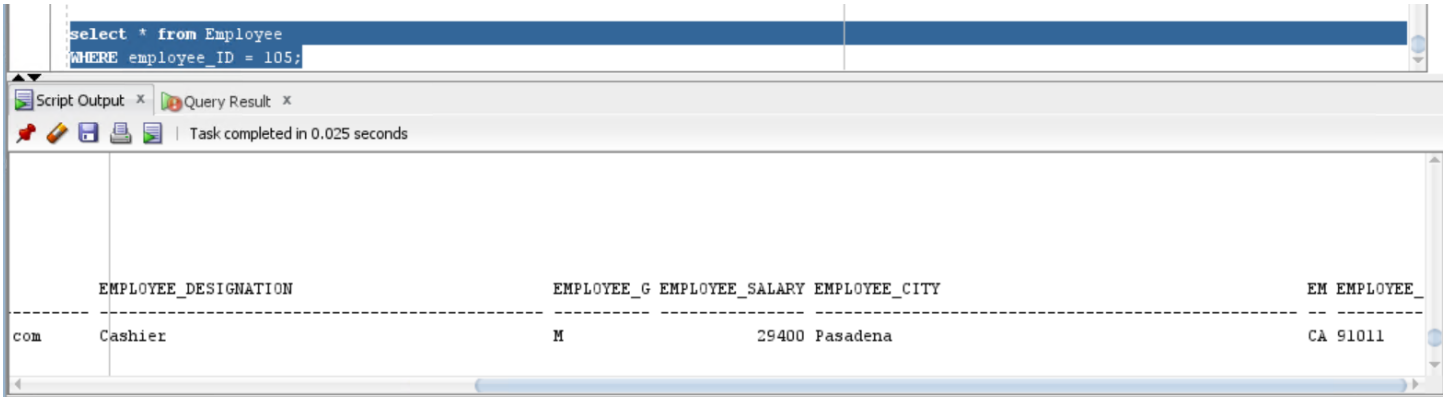
```
Procedure RAISE_EMPLOYEE_SALARY compiled
```

EXECUTE raise_Employee_Salary(105)



select * from Employee

WHERE employee_ID = 105;



FUNCTIONS:

Get Employee Salary by a given Employee Id:

CREATE OR REPLACE FUNCTION get_Employee_Salary

(

v_id IN Employee.Employee_ID%TYPE

)

RETURN VARCHAR

IS

```
   v_Employee_Salary Employee.Employee_Salary%TYPE;
BEGIN
   SELECT Employee_Salary
   INTO v_Employee_Salary
   FROM Employee
   WHERE Employee_ID = v_id;

   RETURN TO_CHAR(v_Employee_Salary); -- Convert to VARCHAR before returning
EXCEPTION
   WHEN NO_DATA_FOUND THEN
      RETURN 'Employee not found';
   WHEN OTHERS THEN
      RAISE;
END get_Employee_Salary;
```

```
IS
    v_Employee_Salary Employee.Employee_Salary%TYPE;
BEGIN
    SELECT Employee_Salary
    INTO v_Employee_Salary
    FROM Employee
    WHERE Employee_ID = v_id;

    RETURN TO_CHAR(v_Employee_Salary); -- Convert to VARCHAR before returning
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        RETURN 'Employee not found';
    WHEN OTHERS THEN
        RAISE;
END get_Employee_Salary;
```

Script Output x | Query Result x

Task completed in 0.024 seconds

```
Function GET_EMPLOYEE_SALARY compiled
```

VARIABLE g_salary NUMBER

exec :g_salary := get_salary(201)

PRINT g_salary