Question 1

Create a table with the following columns :

Column name	Data type
Empno	vachar
Deptno	varchar
Name	varchar
Desig	varchar
Basic	numeric
Join_date	date
gender	character

1. Set the composite key as empno and deptno.
2. Add 3 rows into the table.
3. Display all the records from the above table.
4. Display the empno, name, designation and basic salary of all the employees.
5. Display empno and name of all the employees from department no. 2
6. Display empno, name, desig, department no., and basic salary in the descending order of basic pay.
7. Display all designations without duplicate values.
8. Display empno,name,desig, and basic salary in the descending order of basic pay and in the ascending order of names.
9. Sort the table in the order of basic salary.
10. Delete the records of employees whose basic is less than 5000.

Question 2

Create the following tables
Category_ details (category_id integer (2), category_name varchar (10))
Sub_category_details (sub_category_id integer(2), category_id integer(2),sub_category_name varchar(10))
Product_details (Product_id integer (6), category_id integer(2),sub_category_id integer(2), product_name varchar(10))

Now perform the following operations:

1) Add a primary key constraint (without any constraint name) on column category_id of category_details table.
2) Add a primary key constraint with a constraint name on column sub_category_id of sub_category_details table.

3) Add a foreign key constraint with constraint name on column category_id of sub_category_details table referencing category_id of category_details table.
4) For product_details table add primary key constraint on product_id. Also add foreign key constraint on category_id and sub_category_id columns referencing category_details(category_id) and sub_category_details (sub_category_id). Give appropriate names for all constraints.
5) Add a new column (price numeric(6,2)) to product_details table
6) Insert four tuples in the table. (With valid data)
7) Add a new column BRANDNAME varchar(20) NOT NULL
8) Rename Category_details table to Cat_dt .

Question 3

Create the following tables with given constraints.

1) client_master
Description: Used to store client information

Field	Constraints
Client_no	Primary key/first letter must start with C
Name	Not null
Address 1	
Address 2	
City	
pin code	
State	
Bal_due	

2) product_master
Description: Used to store product information

Field	Constraints
Product_no	Primary key/first letter must start with P
Description	Not null
Profit_percent	Not null
Unit_measure	Not null
Qty_on_hand	Not null
Reorder_lvl	Not null
Sell_price	Not null, can not be 0
Cost_price	Not null, can not be 0

3) sales_master

Description: Used to store salesmen working for the company

Field	Constraints
Salesman_no	Primary key/first letter must start with S
Salesman_name	Not null
Address1	Not null
Address2	
city	
Pin code	
State	
Sal_amt	Not null, can not be 0
Tgt_to_get	Not null, cannot be 0
remarks	Not null

4) Sales_order_

Description: Used to store client's orders

Field	Constraints
Order_no	Primary Key / first letter must start with O

Order_date	
Client_no	Foreign Key references client_no of client_master table
Dely_addr	
Salesman_no	Foreign Key references salesman_no of salesman_master table
Dely_type	Delivery : Part (P) / full (F)
Billed_yn	
Dely_date	Cannot be less than order_ date
Order_status	Values(In Process, fulfilled, Backorder, Cancelled)

5) sales_order_details
Description: Used to store client's orders with details of each product ordered.

Field	**Constraints**
Order_no	Primary key / Foreign key references order_no of the sales_order table
Product_no	Priamry Key / Foreign Key references product_no of the product_master table
Qty_ordered	
Qty_disp	
Product_rate	

1. Find the names of all clients having 'a' as the third letter in their names
2. Find out the clients who stay in Bombay or Delhi

3. Find the names of all clients having two ‘e’ in their names.
4. Find the products whose selling price is greater than 2000 and less than or equal to 5000
5. Find the products whose selling price is more than 1500. Calculate a new selling price as original selling price* 0.15. Rename the new column in the above query as new_price.
6. Count the total number of orders
7. Calculate the average price of all the products
8. Determine the maximum and minimum product prices. Rename the output as max_price and min_price respectively.
9. Count the number of products having price greater than or equal to 1500.
10. Find all the products whose qty_on_hand is less than reorder level.

11. Print the description and total quantity sold for each product
12. Find the value of each product sold.
13. Calculate the average quantity sold for each client that has a maximum order value of 18000.00