Q1- Create and use the following database schema to answer the given queries.

**Worker**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Name | Salary | JoiningDate | DepartmentNo |

**Department**

|  |  |  |  |
| --- | --- | --- | --- |
| DepNo | DName | Location | MgrID |

1. Create both the tables with relevant constraints.
2. Populate the tables with at least five tuples each.
3. Query to display unique “location” from the Department Table.
4. Query to display the Department Name, No. of Employees and the average salary for all employees in that department.
5. Query to display Name with the 1st letter capitalized and all other letter lower case and length of their name of all the workers whose name starts with ‘J’, ’A’ and ‘M’.

Q2- Create and use the following database schema to answer the given queries.

**Branch**

|  |  |  |  |
| --- | --- | --- | --- |
| BranchNo | Street | City | Postcode |

**Staff**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| StaffNo | FName | LName | Position | Sex | DOB | Salary | BranchNo |

1. Create both the tables with relevant constraints.
2. Populate the tables with at least five tuples each.
3. Query to display first name and DOB of every Employee who was born in 2005.
4. Query to display first name and salaries represented by asterisks, where each asterisk (\*) signifies $100.
5. Query to list the first name, last name and salary of all the staff working in “Bangalore”.

Q3- Create and use the following database schema to answer the given queries.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPLOYEE Schema Field** | | **Type** | | **NULL KEY** | | **DEFAULT** | |
| Eno | Char(3) | | NO | | PRI | | NIL |
| Ename | | Varchar(50) | | NO | | NIL | |
| Job\_type | | Varchar(50) | | NO | | NIL | |
| Manager | Char(3) | | Yes | | FK | | NIL |
| Hire\_date | | Date | | NO | | NIL | |
| Dno | Integer | | YES | | FK | | NIL |
| Commission | | Decimal(10,2) | | YES | | NIL | |
| Salary | | Decimal(7,2) | | NO | | NIL | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **DEPARTMENT Schema Field** | | **Type** | | **NULL KEY** | | **DEFAULT** | |
| Dno | Integer | | No | | PRI | | NULL |
| Dname | | Varchar(50) | | Yes | | NULL | |
| Location | | Varchar(50) | | Yes | | New Delhi | |

1. Create both the tables with proper constraints.
2. Insert at least 5 rows in each of the tables.
3. Query to display the following for each employee <E-Name> earns < Salary> monthly but wants < 3 \* Current Salary >. Label the Column as Dream Salary.
4. Query to display Name and Employee no. Along with their Manger’s Name and the Manager’s employee no; along with the Employees’ Name who do not have a Manager.
5. Query to display Unique Listing of all Jobs that are in Department # 30.

Q4- Create and use the following database schema to answer the given queries.

**Branch**

|  |  |  |  |
| --- | --- | --- | --- |
| BranchNo | Street | City | Postcode |

**Staff**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| StaffNo | FName | LName | Position | Sex | DOB | Salary | BranchNo |

1. Create both the tables with relevant constraints.
2. Populate the tables with at least five tuples each.
3. List the address of all Branch Offices in Delhi or Mumbai.
4. Find the minimum and maximum staff salary.
5. Count the number of female workers working in “Jaipur”.

**Q5**

Q- Create and use the following database schema to answer the given queries.

**Worker**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Name | Salary | JoiningDate | DepartmentNo |

**Department**

|  |  |  |  |
| --- | --- | --- | --- |
| DepNo | DName | Location | MgrID |

1. Create both the tables with relevant constraints.
2. Populate the tables with at least five tuples each.
3. Display the name of all the workers along with their department name and manager name of that department.
4. Count the number of workers working in “Finance” department.
5. Update the salary of all employees who work in the location 'Delhi' by giving a 20% raise.

**Q6**

**Customer**

|  |  |  |  |
| --- | --- | --- | --- |
| CustomerID | Customer\_Name | City | ProductID |

**Department**

|  |  |  |
| --- | --- | --- |
| ProductID | Prod\_Name | Prod\_details |

1. Create both the tables with relevant constraints.
2. Populate the tables with at least five tuples each.
3. Retrieve the name of customers who have purchased product with Prod\_Name as ‘Toothpaste” and “Toothbrush”.
4. Retrieve the total number of products bought by each customer.
5. Retrieve the name of all products that have been bought by customers residing in “Delhi”.

**Q7**

**Customer**

|  |  |  |  |
| --- | --- | --- | --- |
| CustomerID | Customer\_Name | City | ProductID |

**Department**

|  |  |  |
| --- | --- | --- |
| ProductID | Prod\_Name | Prod\_details |

1. Create both the tables with relevant constraints.
2. Populate the tables with at least five tuples each.
3. Retrieve the name of customers who are residing in “Jaipur”.
4. Query to display unique listing of all customers that have purchased the product with the name “Soap”.
5. Query to add a new column named “Prod\_price”, which represents the price of each product. Fill in the necessary values for all the existing records.