**EXERCISE - 4**

**Distinct Keyword:**

1. Retrieve a list of unique first names from the Employees table.
2. Display a list of distinct last names of employees.
3. List the unique hire dates of all employees.
4. Show distinct salary values from the table.
5. Display a list of employee IDs with no duplicates.

**Comparing Values:**

1. Retrieve employees with a salary greater than $50,000.
2. List employees hired after January 1, 2022.
3. Display employees with a salary equal to $60,000.
4. Show employees with a first name equal to 'John'.
5. List employees with a salary less than or equal to $55,000.

**Like Operator:**

1. Retrieve employees with last names containing the substring 'son'.
2. Display employees with first names ending with 'a'.
3. List employees with last names starting with 'Sm'.
4. Show employees with first names containing 'e' in any position.
5. Display employees with last names that exactly match 'Brown'.

**IN Operator:**

1. Retrieve employees with employee IDs 101, 102, and 103.
2. List employees with first names 'John', 'Jane', and 'Michael'.
3. Display employees with salaries of $50,000.00, $55,000.00, or $60,000.00.
4. Show employees with last names 'Smith', 'Johnson', or 'Williams'.
5. List employees with employee IDs 104, 105, or 106.

**BETWEEN Operator:**

1. Retrieve employees with salaries between $50,000.00 and $60,000.00.
2. List employees hired between '2022-01-01' and '2022-12-31'.
3. Display employees with employee IDs between 101 and 110.
4. Show employees hired between '2021-01-01' and '2021-12-31'.
5. List employees with salaries between $45,000.00 and $55,000.00.

**IS NULL Operator:**

1. Retrieve employees with null hire dates.
2. List employees with null salaries.
3. Display employees with null first names.
4. Show employees with null last names.
5. List employees with null employee IDs.

**Logical Operator - IS NAN, IS INFINITE, IS NOT NULL, IS NOT NAN, IS NOT INFINITE:**

1. Retrieve employees with NaN (Not a Number) salaries.
2. List employees with infinite salaries.
3. Display employees with non-null hire dates.
4. Show employees with salaries that are not NaN.
5. List employees with salaries that are not infinite.

**NOT Like Operator:**

1. Retrieve employees with last names not containing the substring 'son'.
2. List employees with first names not ending with 'a'.
3. Display employees with last names not starting with 'Sm'.
4. Show employees with first names not containing 'e' in any position.
5. List employees with last names that do not exactly match 'Brown'.

**NOT IN Operator:**

1. Retrieve employees with employee IDs not in the range 101 to 110.
2. List employees with first names not 'John', 'Jane', or 'Michael'.
3. Display employees with salaries not $50,000.00, $55,000.00, or $60,000.00.
4. Show employees with last names not 'Smith', 'Johnson', or 'Williams'.
5. List employees with employee IDs not 104, 105, or 106.

**NOT BETWEEN Operator:**

1. Retrieve employees with salaries not between $50,000.00 and $60,000.00.
2. List employees hired not between '2022-01-01' and '2022-12-31'.
3. Display employees with employee IDs not between 101 and 110.
4. Show employees hired not between '2021-01-01' and '2021-12-31'.
5. List employees with salaries not between $45,000.00 and $55,000.00.
6. IS NOT NULL Operator:
7. 41. Retrieve employees with non-null hire dates.
8. List employees with non-null salaries.
9. Display employees with non-null first names.
10. Show employees with non-null last names.
11. List employees with non-null employee IDs.

**IS NOT NAN Operator:**

1. Retrieve employees with salaries that are not NaN.
2. List employees with no NaN values in the salary column.
3. Display employees with non-NaN first names.
4. Show employees with non-NaN last names.
5. List employees with no NaN values in the employee ID column.

**IS NOT INFINITE Operator:**

1. Retrieve employees with salaries that are not infinite.
2. List employees with no infinite salary values.
3. Display employees with non-infinite hire dates.
4. Show employees with non-infinite first names.
5. List employees with no infinite employee IDs.

**Logical Operator:**

1. Retrieve employees with a salary greater than $50,000 and hired after January 1, 2022.
2. List employees with a salary greater than $60,000 or hired before January 1, 2021.
3. Display employees with a salary greater than $50,000 and a last name starting with 'S'.
4. Show employees with a null hire date or a salary less than $40,000.
5. List employees with a salary greater than $55,000 and a first name not equal to 'Jane'.

**Using Table Alias:**

1. Display the first name and last name of employees using the alias 'Name'.
2. List the hire date and salary of employees using the alias 'Employment\_Details'.
3. Retrieve the employee ID and hire date using the alias 'ID\_Date'.
4. Show the last name and salary of employees using the alias 'Last\_Salary'.
5. List the first name and hire date of employees using the alias 'Name\_Date'.

**Using Column Alias:**

1. Retrieve a list of employee IDs with the alias 'EmployeeID'.
2. Display the first name and last name with the alias 'Full\_Name'.
3. List the hire date with the alias 'Join\_Date'.
4. Show the salary with the alias 'Income'.
5. Display the last name and salary with the alias 'Details'.