

PROGRAM 4

RETRIEVING DATA EMPLOYEE TABLE :-

1. Retrieve employees who joined before 30-Jun-1980 or after 31-Dec-1981.
2. Display the names of employees whose second alphabet is 'A'.
3. Display the names of employees whose name consists of exactly 5 characters.
4. Display the names of employees whose second alphabet is 'A'. (Repeated)
5. List employees who are not working as Salesman, Clerk, or Analyst.
6. Display employee name and annual salary, showing the highest salary first.
7. Display name, salary, HRA, DA, PF, and total salary, where:
 - HRA = 15% of salary
 - DA = 10% of salary
 - PF = 5% of salary

$$\text{Total Salary} = (\text{Salary} + \text{HRA} + \text{DA}) - \text{PF}$$

8. Update salary by 10% increment for employees not eligible for commission.
9. Display employees whose salary will be greater than 3000 after a 20% increment.
10. Display employees whose salary contains at least 3 digits.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT * FROM employee
-> WHERE hiredate < '1980-06-30' OR hiredate > '1981-12-31';
+-----+-----+-----+-----+-----+-----+-----+-----+
| empno | ename | job    | mgr   | hiredate | sal   | comm | deptno |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 7788  | SCOTT | ANALYST | 7566  | 1982-12-09 | 3000  | NULL  | 40    |
| 7876  | ADAMS | CLERK   | 7788  | 1983-01-12 | 1100  | NULL  | 20    |
| 7934  | MILLER | CLERK   | 7782  | 1982-01-23 | 1300  | NULL  | 10    |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.113 sec)
```

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename
-> FROM employee
-> WHERE ename LIKE '_A%';
+-----+
| ename |
+-----+
| WARD  |
| MARTIN |
| JAMES |
+-----+
3 rows in set (0.005 sec)
```

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename
    -> FROM employee
    -> WHERE LENGTH(ename) = 5;
+-----+
| ename |
+-----+
| SMITH |
| ALLEN |
| JONES |
| BLAKE |
| CLARK |
| SCOTT |
| ADAMS |
| JAMES |
+-----+
8 rows in set (0.006 sec)
```

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename FROM employee
    -> WHERE ename LIKE '_A%';
+-----+
| ename |
+-----+
| WARD |
| MARTIN |
| JAMES |
+-----+
3 rows in set (0.001 sec)
```

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename
    -> FROM employee
    -> WHERE job NOT IN ('SALESMAN', 'CLERK', 'ANALYST');
+-----+
| ename |
+-----+
| JONES |
| BLAKE |
| CLARK |
| KING |
+-----+
4 rows in set (0.003 sec)
```

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename, sal*12 AS annual_salary FROM employee
-> ORDER BY sal DESC;
+-----+-----+
| ename | annual_salary |
+-----+-----+
| KING   |      60000 |
| SCOTT  |      36000 |
| FORD   |      36000 |
| JONES  |      35700 |
| BLAKE  |      34200 |
| CLARK  |      29400 |
| ALLEN  |      19200 |
| TURNER |      18000 |
| MILLER |      15600 |
| MARTIN |      15000 |
| WARD   |      15000 |
| ADAMS  |      13200 |
| JAMES  |      11400 |
| SMITH  |       9600 |
+-----+-----+
14 rows in set (0.007 sec)
```

```
->      (sal + (sal*0.15) + (sal*0.10) - (sal*0.05)) AS totalsal
-> FROM employee
-> ORDER BY totalsal DESC;
+-----+-----+-----+-----+-----+-----+
| ename | sal  | hra   | da    | pf    | totalsal |
+-----+-----+-----+-----+-----+-----+
| KING   | 5000 | 750.00 | 500.00 | 250.00 | 6000.00 |
| SCOTT  | 3000 | 450.00 | 300.00 | 150.00 | 3600.00 |
| FORD   | 3000 | 450.00 | 300.00 | 150.00 | 3600.00 |
| JONES  | 2975 | 446.25 | 297.50 | 148.75 | 3570.00 |
| BLAKE  | 2850 | 427.50 | 285.00 | 142.50 | 3420.00 |
| CLARK  | 2450 | 367.50 | 245.00 | 122.50 | 2940.00 |
| ALLEN  | 1600 | 240.00 | 160.00 | 80.00  | 1920.00 |
| TURNER | 1500 | 225.00 | 150.00 | 75.00  | 1800.00 |
| MILLER | 1300 | 195.00 | 130.00 | 65.00  | 1560.00 |
| MARTIN | 1250 | 187.50 | 125.00 | 62.50  | 1500.00 |
| WARD   | 1250 | 187.50 | 125.00 | 62.50  | 1500.00 |
| ADAMS  | 1100 | 165.00 | 110.00 | 55.00  | 1320.00 |
| JAMES  | 950  | 142.50 | 95.00  | 47.50  | 1140.00 |
| SMITH  | 800  | 120.00 | 80.00  | 40.00  | 960.00 |
+-----+-----+-----+-----+-----+-----+
14 rows in set (0.007 sec)
```

```
MariaDB [VARUN_SINGH_2CSE9]> UPDATE employee SET sal = sal + (sal * 0.10)
-> WHERE comm IS NULL OR comm = 0;
Query OK, 11 rows affected, 1 warning (0.014 sec)
Rows matched: 11  Changed: 11  Warnings: 1
```

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename FROM employee WHERE sal + (sal * 0.20) > 3000;
+-----+
| ename |
+-----+
| JONES |
| BLAKE |
| CLARK |
| SCOTT |
| KING  |
| FORD  |
+-----+
6 rows in set (0.001 sec)

MariaDB [VARUN_SINGH_2CSE9]> SELECT ename, sal FROM employee WHERE LENGTH(sal) >= 3;
+-----+-----+
| ename | sal  |
+-----+-----+
| SMITH | 880 |
| ALLEN | 1600|
| WARD  | 1250|
| JONES | 3273|
| MARTIN| 1250|
| BLAKE | 3135|
| CLARK | 2695|
| SCOTT | 3300|
| KING  | 5500|
| TURNER| 1650|
| ADAMS | 1210|
| JAMES | 1045|
| FORD  | 3300|
| MILLER| 1430|
+-----+-----+
14 rows in set (0.002 sec)
```