Submitted to:

Engr. Muhammad Shoaib

Submitted By:

Hadia Zakir

Roll No:

2023-BSE-019

Section:

4B

LAB#4

LAB TASKS:

1. Create a query to display the employee name and salary of employees earning more than \$1800.

```
SQL> select ename, sal from emp where sal>1800;

ENAME SAL

JONES 2975

BLAKE 2850

CLARK 2450

SCOTT 3000

KING 5000

FORD 3000

6 rows selected.
```

2. Create a query to display the employee name and department number of for employee number 7900.

```
SQL> select ename, deptno from emp where empno = 7900;
ENAME DEPTNO
-----
JAMES 30
```

3. Display the employee name and salary for all employees whose salary is not in the range of \$500 and \$1200.

```
SQL> select ename, sal from emp where sal not in (500,1200);
ENAME
                   SAL
SMITH
ALLEN
                  1600
WARD
                  1250
JONES
                  2975
MARTIN
                  1250
BLAKE
                  2850
CLARK
                  2450
SCOTT
                  3000
KING
                  5000
TURNER
                  1500
ADAMS
                  1100
ENAME
                   SAL
JAMES
                   950
FORD
                  3000
MILLER
                  1300
14 rows selected.
```

4. Display the employee name, job, start date of employees hired between 20 February 1981 and May 1, 1982. Order the query in ascending order by start date.

```
SQL> SELECT ename, job, hiredate FROM emp WHERE hiredate BETWEEN TO_DATE('20-FEB-1981', 'DD-MON-YYYY') AND TO_DATE('01-MAY-1982', 'DD-MON-YYYY') ORDER BY hiredate ASC;

ENAME JOB HIREDATE

ALLEN SALESMAN 20-FEB-81

WARD SALESMAN 22-FEB-81

JONES MANAGER 02-APR-81

BLAKE MANAGER 03-INMY-81

CLARK MANAGER 09-JUN-81

TURNER SALESMAN 8-SEP-81

KARTIN SALESMAN 28-SEP-81

KARTIN SALESMAN 28-SEP-81

KARTIN SALESMAN 08-SEP-81

MARTIN SALESMAN 08-SEP-81

KANGER 03-DEC-81

FORD ANALYST 08-DEC-81

MILLER CLERK 23-JAN-82
```

5. Display the employee name and department number of all employees in department 20 and 30 in alphabetical order by name.

```
SQL> SELECT ename, deptno FROM emp WHERE deptno IN (20, 30) ORDER BY ename;
                DEPTNO
ENAME
ADAMS
                    20
ALLEN
                    30
BLAKE
                    30
FORD
                    20
JAMES
                    30
JONES
                    20
MARTIN
                    30
SCOTT
                    20
SMITH
                    20
TURNER
                    30
MARD
                    30
11 rows selected.
```

6. List the last name and salary of employees who earn between \$1000 and \$2000 and are in department 10 or 30. Label the columns Employee and Monthly Salary, respectively.

```
SQL> SELECT ename AS Employee, sal AS "Monthly Salary" FROM emp WHERE sal BETWEEN 1000 AND 2000 AND deptno IN (10, 30);

EMPLOYEE Monthly Salary

ALLEN 1600
WARD 1250
MARTIN 1250
TURNER 1500
MILLER 1300
```

7. Display the employee name and hire date of every employee who was hired in 1982.

```
SQL> SELECT ename, hiredate FROM emp WHERE TO_CHAR(hiredate, 'YYYY') = '1982';

ENAME HIREDATE

MILLER 23-JAN-82
```

8. Display the employee name and job title of all employees who do not have a manager.

```
SQL> SELECT ename, job FROM emp WHERE mgr IS NULL;

ENAME JOB
-----KING PRESIDENT
```

9. Display the last name, salary, and commission for all employees who earn commissions. Sort data in descending order of salary and commissions.

```
SQL> SELECT ename, sal, comm FROM emp WHERE comm IS NOT NULL ORDER BY sal DESC, comm DESC;
ENAME
                   SAL
                             COMM
ALLEN
                               300
                  1600
TURNER
                  1500
                                0
MARTIN
                  1250
                              1400
                              500
MARD
                  1250
```

10. Display all employee names of all employees where the third letter of the name is 'a'.

```
SQL> SELECT ename FROM emp WHERE ename LIKE '__a%';
no rows selected
```

11. Display the employee name of all employees who have an 'a' and 'e' in their name.

```
SQL> SELECT ename FROM emp WHERE ename LIKE '%a%' AND ename LIKE '%e%';
```

12. Display the employee name, job and salary for employees whose job title is entered by the user and whose salary is not equal to \$1000, \$1200, \$1800. Also sort the data according to the column name entered by the user.

```
SQL> SELECT ename, job, sal FROM emp WHERE job = '&job_title' AND sal NOT IN (1000, 1200, 1800) ORDER BY &sort_column;
Enter value for job_title: CLERK
Enter value for sort_column: sal
old 1: SELECT ename, job, sal FROM emp WHERE job = '&job_title' AND sal NOT IN (1000, 1200, 1800) ORDER BY &sort_column
new 1: SELECT ename, job, sal FROM emp WHERE job = 'CLERK' AND sal NOT IN (1000, 1200, 1800) ORDER BY sal

ENAME JOB SAL

SMITH CLERK 800
JAMES CLERK 950
ADAMS CLERK 1100
MILLER CLERK 1300
```

13. Display the employee name, salary, and commissions for all employees whose commission amount is 20%.

```
SQL> SELECT ename, sal, comm FROM emp WHERE comm = 0.2 * sal;
```

14. Display the employee name, salary of all employees whose condition of salary is entered by user. Sort the data in descending order according to the salary.

```
SQL> SELECT ename, sal FROM emp WHERE sal &salary_condition ORDER BY sal DESC;
Enter value for salary_condition: > 2000
    1: SELECT ename, sal FROM emp WHERE sal &salary_condition ORDER BY sal DESC
     1: SELECT ename, sal FROM emp WHERE sal > 2000 ORDER BY sal DESC
ENAME
                  SAL
KING
                 5000
FORD
                 3000
SCOTT
                 3000
JONES
                 2975
BLAKE
                 2850
LARK
                 2450
 rows selected.
```