Query 1: Write a query to display name, job, hiredate and employee number for each employee with employee number appearing first.

Solution

```
SELECT empno, ename, job, hiredate FROM emp;
```

empno	ename	job	hiredate
7369	SMITH	CLERK	1980-12-17
7499	ALLEN	SALESMAN	1981-02-20
7521	WARD	SALESMAN	1981-02-22
7566	JONES	MANAGER	1981-04-02
7654	MARTIN	SALESMAN	1981-09-28
7698	BLAKE	MANAGER	1981-05-01
7782	CLARK	MANAGER	1981-06-09
7788	SCOTT	ANALYST	1982-12-09
7839	KING	PRESIDENT	1981-11-17
7844	TURNER	SALESMAN	1981-09-08
7876	ADAMS	CLERK	1983-01-12
7900	JAMES	CLERK	1981-12-03
7902	FORD	ANALYST	1981-12-03
7934	MILLER	CLERK	1982-01-23

Query 2: Write a query to display unique jobs from the employee table.

Solution

```
SELECT DISTINCT job FROM emp;
```

job
CLERK
SALESMAN
MANAGER
ANALYST
PRESIDENT

Query 3: Write a query to display name concatenated by a job separated by a comma.

Solution

```
SELECT CONCAT(ename, ", ", job) FROM emp;
```

```
+--------------------------+
| concat(ename, ", ", job) |
+--------------------------+
| SMITH, CLERK             |
| ALLEN, SALESMAN          |
| WARD, SALESMAN           |
| JONES, MANAGER           |
| MARTIN, SALESMAN         |
| BLAKE, MANAGER           |
| CLARK, MANAGER           |
| SCOTT, ANALYST           |
| KING, PRESIDENT          |
| TURNER, SALESMAN         |
| ADAMS, CLERK             |
| JAMES, CLERK             |
| FORD, ANALYST            |
| MILLER, CLERK            |
+--------------------------+
```

Query 4: Write a query to display the name and salary of employees earning more than $2850.

Solution

```
SELECT ename, sal FROM emp WHERE sal > 2850;
```

```
+-------+---------+
| ename | sal     |
+-------+---------+
| JONES | 2975.00 |
| SCOTT | 3000.00 |
| KING  | 5000.00 |
| FORD  | 3000.00 |
+-------+---------+
```

Query 5: Write a query to display the name and department number for employee number 7900.

Solution

```
SELECT ename, deptno FROM emp WHERE empno = 7900;
```

```
+-------+--------+
| ename | deptno |
+-------+--------+
| JAMES |     30 |
+-------+--------+
```

Query 6: Write a query to display the name and salary of all employees whose salary is not in the range of $1500 and $2850.

Solution

```
SELECT ename, sal FROM emp WHERE sal NOT BETWEEN 1500 AND 2850;
```

ename	sal
SMITH	800.00
WARD	1250.00
JONES	2975.00
MARTIN	1250.00
SCOTT	3000.00
KING	5000.00
ADAMS	1100.00
JAMES	950.00
FORD	3000.00
MILLER	1300.00

Query 7: Write a query to display the name and department number of all employees in departments 10 and 30 in alphabetical order by name.

Solution

```
SELECT ename, deptno FROM emp WHERE deptno = 10 OR deptno = 30 ORDER BY ename;
```

ename	deptno
ALLEN	30
BLAKE	30
CLARK	10
JAMES	30
KING	10
MARTIN	30
MILLER	10
TURNER	30
WARD	30

Query 8: Write a query to display the name and salary of employees who earned more than $1500 and are in department number 10 or 30.

Solution

```
SELECT ename, sal FROM emp WHERE sal > 1500 AND (deptno = 10 OR deptno = 30);
```

ename	sal
ALLEN	1600.00
BLAKE	2850.00
CLARK	2450.00
KING	5000.00

Query 9: Write a query to display the name and hire date of every employee who was hired in 1981.

Solution

```
SELECT ename, hiredate FROM emp WHERE hiredate LIKE "1981%";
```

ename	hiredate
ALLEN	1981-02-20
WARD	1981-02-22
JONES	1981-04-02
MARTIN	1981-09-28
BLAKE	1981-05-01
CLARK	1981-06-09
KING	1981-11-17
TURNER	1981-09-08
JAMES	1981-12-03
FORD	1981-12-03

Query 10: Write a query to display the name and job of all employees who do not have a manager.

Solution

```
SELECT ename,job FROM emp WHERE NOT (job='Manager');;
```

ename	job
SMITH	CLERK
ALLEN	SALESMAN
WARD	SALESMAN
MARTIN	SALSEMAN
SCOTT	ANALYST
KING	PRESIDENT
TURNER	SALESMAN
ADAMS	CLERK
JAMES	CLERK
FORD	ANALYST
MILLER	CLERK

Query 11: Write a query to display the name, salary and commission for all employees who earn commission. Sort the data in descending order of salary.

Solution

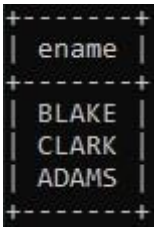
```
SELECT ename, sal, comm FROM emp WHERE (comm IS NOT NULL) AND (comm <>
0.00) ORDER BY sal DESC;
```

ename	sal	comm
ALLEN	1600.00	300.00
MARTIN	1250.00	1400.00

Query 12: Write a query to display the names of all employees where the third letter of their name is A.

Solution

```
SELECT ename FROM emp WHERE ename LIKE "__A%";
```

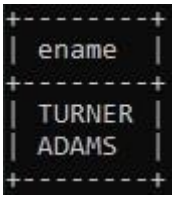


ename
BLAKE
CLARK
ADAMS

Query 13: Write a query to display the names of all employees that have two R's or A's in their name and are in department number 30 or their manager is 7788.

Solution

```
SELECT ename FROM emp WHERE ((ename LIKE "%A%A%" OR ename LIKE "%R%R%")
AND deptno = 30) OR mgr = 7788;
```

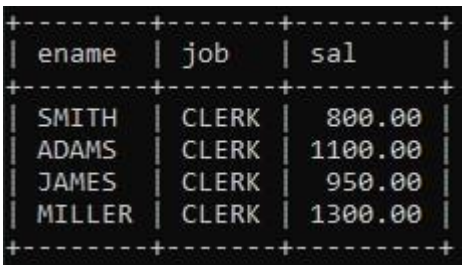


ename
TURNER
ADAMS

Query14. Write a query to display the name, job and salary of all employees whose job is clerk or analyst, and their salary are not equal to 1000, 3000 or 5000.

Solution

```
SELECT ename, job, sal FROM emp WHERE (job = "clerk" OR job = "analyst")
AND (sal NOT IN (1000, 3000, 5000));
```



ename	job	sal
SMITH	CLERK	800.00
ADAMS	CLERK	1100.00
JAMES	CLERK	950.00
MILLER	CLERK	1300.00

Query15. Write a query to display the name, salary and commission of all employees whose commission amount is greater than their salary increased by 5%.

Solution

```
SELECT ename, sal, comm FROM emp WHERE comm > sal * 1.05;
```

ename	sal	comm
MARTIN	1250.00	1400.00

Query16. Write a query to display a current date.

Solution

```
SELECT CURDATE();
```

CURDATE()
2023-10-12

Query17. Write a query to display employee number, name, salary, salary increased by 15% expressed as a whole number.

Solution

```
SELECT empno, ename, sal, (sal * 1.15) AS aggr_sal FROM emp;
```

empno	ename	sal	aggr_sal
7369	SMITH	800.00	920.0000
7499	ALLEN	1600.00	1840.0000
7521	WARD	1250.00	1437.5000
7566	JONES	2975.00	3421.2500
7654	MARTIN	1250.00	1437.5000
7698	BLAKE	2850.00	3277.5000
7782	CLARK	2450.00	2817.5000
7788	SCOTT	3000.00	3450.0000
7839	KING	5000.00	5750.0000
7844	TURNER	1500.00	1725.0000
7876	ADAMS	1100.00	1265.0000
7900	JAMES	950.00	1092.5000
7902	FORD	3000.00	3450.0000
7934	MILLER	1300.00	1495.0000

Query18. Write a query to display the employee number, name, salary, salary increased by 15% expressed as a whole number and increase in salary.

Solution

```
SELECT empno, ename, sal, (sal * 1.15) AS aggr_sal, ((sal * 1.15)-sal)
AS incr_sal FROM emp;
```

empno	ename	sal	aggr_sal	incr_sal
7369	SMITH	800.00	920.0000	120.0000
7499	ALLEN	1600.00	1840.0000	240.0000
7521	WARD	1250.00	1437.5000	187.5000
7566	JONES	2975.00	3421.2500	446.2500
7654	MARTIN	1250.00	1437.5000	187.5000
7698	BLAKE	2850.00	3277.5000	427.5000
7782	CLARK	2450.00	2817.5000	367.5000
7788	SCOTT	3000.00	3450.0000	450.0000
7839	KING	5000.00	5750.0000	750.0000
7844	TURNER	1500.00	1725.0000	225.0000
7876	ADAMS	1100.00	1265.0000	165.0000
7900	JAMES	950.00	1092.5000	142.5000
7902	FORD	3000.00	3450.0000	450.0000
7934	MILLER	1300.00	1495.0000	195.0000

Query19.Write a query to display the following for each employee: -

<ename> earns <salary> monthly but wants <3 times salary>. Label the column as Dream Salary.

Solution

```
SELECT CONCAT(ename, " earns ", sal, " but wants ", 3 * sal) AS "Dream
Salary" FROM emp;
```

Dream Salary
SMITH earns 800.00 but wants 2400.00
ALLEN earns 1600.00 but wants 4800.00
WARD earns 1250.00 but wants 3750.00
JONES earns 2975.00 but wants 8925.00
MARTIN earns 1250.00 but wants 3750.00
BLAKE earns 2850.00 but wants 8550.00
CLARK earns 2450.00 but wants 7350.00
SCOTT earns 3000.00 but wants 9000.00
KING earns 5000.00 but wants 15000.00
TURNER earns 1500.00 but wants 4500.00
ADAMS earns 1100.00 but wants 3300.00
JAMES earns 950.00 but wants 2850.00
FORD earns 3000.00 but wants 9000.00
MILLER earns 1300.00 but wants 3900.00

Query20.Write a query to display the employees name with the first letter capitalized and all other letters lower case and length of their name for all employees whose name start with J, A and M.

Solution

```
SELECT CONCAT(UPPER(SUBSTRING(ename, 1, 1)), LOWER(SUBSTRING(ename, 2))) AS "Employee Name" FROM emp WHERE (ename LIKE "J%" OR ename LIKE "A%" OR ename LIKE "R%");
```

Employee Name
Allen
Jones
Adams
James

Query21. Write a query to display the name, department name, department number for all employees.

Solution

```
SELECT e.ename AS "Employee Name", d.dname AS "Department Name", d.deptno AS "Department Number" FROM emp e JOIN dept e ON e.deptno = d.deptno;
```

Employee Name	Department Name	Department Number
SMITH	RESEARCH	20
ALLEN	SALES	30
WARD	SALES	30
JONES	RESEARCH	20
MARTIN	SALES	30
BLAKE	SALES	30
CLARK	ACCOUNTING	10
SCOTT	RESEARCH	20
KING	ACCOUNTING	10
TURNER	SALES	30
ADAMS	RESEARCH	20
JAMES	SALES	30
FORD	RESEARCH	20
MILLER	ACCOUNTING	10

Query22. Write a query that displays the unique listing of all jobs that are in department 30.

Solution

```
SELECT DISTINCT job FROM emp WHERE deptno = 30;
```

job
SALESMAN
MANAGER
CLERK

Query23. Write a query to display the employee name, department name and location for all employees who earn a commission.

Solution

```
SELECT e.ename AS "Employee Name", d.dname AS "Department Name", d.loc
AS "Department Location" FROM emp e JOIN dept d ON e.deptno = d.deptno;
```

Employee Name	Department Name	Department Location
SMITH	RESEARCH	DALLAS
ALLEN	SALES	CHICAGO
WARD	SALES	CHICAGO
JONES	RESEARCH	DALLAS
MARTIN	SALES	CHICAGO
BLAKE	SALES	CHICAGO
CLARK	ACCOUNTING	NEW YORK
SCOTT	RESEARCH	DALLAS
KING	ACCOUNTING	NEW YORK
TURNER	SALES	CHICAGO
ADAMS	RESEARCH	DALLAS
JAMES	SALES	CHICAGO
FORD	RESEARCH	DALLAS
MILLER	ACCOUNTING	NEW YORK

Query24. Write a query to display the employee name and department name for all employees who have 'A' in their name.

Solution

```
SELECT e.ename AS "Employee Name", d.dname AS "Department Name" FROM emp
e JOIN dept d ON e.deptno = d.deptno WHERE e.ename LIKE "%A%";
```

Employee Name	Department Name
ALLEN	SALES
WARD	SALES
MARTIN	SALES
BLAKE	SALES
CLARK	ACCOUNTING
ADAMS	RESEARCH
JAMES	SALES

Query25. Write a query to display the name, job, department number and department name for all employees who work at location DALLAS.

Solution

```
SELECT e.ename AS "Employee Name", e.job AS "Job", d.deptno AS "Department
Number", d.dname AS "Department Name" FROM emp e JOIN dept d ON e.deptno
= d.deptno WHERE d.loc = "DALLAS";
```

Employee Name	Job	Department Number	Department Name
SMITH	CLERK	20	RESEARCH
JONES	MANAGER	20	RESEARCH
SCOTT	ANALYST	20	RESEARCH
ADAMS	CLERK	20	RESEARCH
FORD	ANALYST	20	RESEARCH