**Date and Time functions**

**1. Write a query to display the first day of the month (in datetime format) three**

**months before the current month.**

**Sample current date : 2014-09-03**

**Expected result : 2014-06-01**

SQL> select to\_char(trunc(add\_months(sysdate,-3),'month'),'yyyy-mm-dd') as first\_day from emp;

FIRST\_DAY

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2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

2023-07-01

14 rows selected.

**2. Write a query to display the last day of the month (in datetime format) three**

**months before the current month.**SQL> select last\_day(add\_months(sysdate,-3)) from emp;

LAST\_DAY(

---------

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

31-JUL-23

14 rows selected.

**3. Write a query to get the distinct Mondays from hiredate in emp tables.**

SQL> select hiredate, next\_day(hiredate-1,'Monday') as next\_monday from emp where next\_day(hiredate-1, 'Monday')=hiredate;

HIREDATE NEXT\_MOND

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28-SEP-81 28-SEP-81

**4. Write a query to get the first day of the current year.**

SQL> select trunc(sysdate, 'year') from emp;

TRUNC(SYS

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01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

01-JAN-23

14 rows selected.

**5. Write a query to get the last day of the current year.**

SQL> select round(sysdate,'year')-1 from emp;

ROUND(SYS

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31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

31-DEC-23

14 rows selected**.**

**6. Write a query to calculate your age in year.**

SQL> select trunc(months\_between(sysdate,'05-mar-2001')/12) as age from emp;

AGE

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22

**7. Write a query to get the current date in the following format**

**Sample date : 04-sep-2014**

**Output : September 4, 2014**

select to\_char(to\_date('04-sep-2014', 'dd-month-yyyy'),'Month dd,yyyy') CUrrent\_0date from dual;

## 

| **CURRENT\_0DATE** |
| --- |
| September 04,2014 |

**8. Write a query to get the current date in Thursday September 2014 format.**

**Thursday September 2014**

select to\_char(sysdate, 'Day Month yyyy') curr\_date from dual;

## 

| **CURR\_DATE** |
| --- |
| Wednesday October 2023 |

**9. Write a query to extract the year from the current date.**

select extract(year from sysdate) curr\_year from dual;

| **CURR\_YEAR** |
| --- |
| 2023 |

**10. Write a query to get the first name and hire date from employees table**

**where hire date between 1-Jun-87' and '30-jul-87’**

select ename, hiredate from emp where hiredate between'1-jun-80' and '30-jul-87';

| **ENAME** | **HIREDATE** |
| --- | --- |
| SMITH | 17-DEC-80 |
| ALLEN | 20-FEB-81 |
| WARD | 22-FEB-81 |
| JONES | 02-APR-81 |
| MARTIN | 28-SEP-81 |
| BLAKE | 01-MAY-81 |
| CLARK | 09-JUN-81 |
| SCOTT | 09-DEC-82 |
| KING | 17-NOV-81 |
| TURNER | 08-SEP-81 |
| ADAMS | 12-JAN-83 |
| JAMES | 03-DEC-81 |
| FORD | 03-DEC-81 |
| MILLER | 23-JAN-82 |

**11. Write a query to display the current date in the following format.**

**Sample output: Thursday 4th September 2014 00:00:00**

select to\_char(sysdate, 'day dd Month yyyy hh24:mi:ss') curr\_date from dual;

| **CURR\_DATE** |
| --- |
| wednesday 04 October 2023 15:22:54 |

**12. Write a query to display the current date in the following format.**

**Sample output: 05/09/2014**

select to\_char(sysdate, 'dd/mm/yyyy') curr\_date from dual;

| **CURR\_DATE** |
| --- |
| 04/10/2023 |

**13. Write a query to display the current date in the following format.**

**Sample output: 12:00 AM Sep 5, 2014**

select to\_char(sysdate, 'hh:mm AM Mon dd, yyyy') curr\_time from dual;

| **CURR\_TIME** |
| --- |
| 03:10 PM Oct 04, 2023 |

**14. Write a query to get the employees who joined in the month of June.**

select \* from emp where extract (month from hiredate)='6';

| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 7782 | CLARK | MANAGER | 7839 | 09-JUN-81 | 2450 | - | 10 |

**15. Write a query to get the years in which more than 10 employees joined.**

select count(\*) "No of emp joined", extract(year from hiredate) Hiring\_year from emp group by (extract (year from hiredate)) having count(\*)>=10;

| **COUNT(\*)** | **HIRING\_YEAR** |
| --- | --- |
| 10 | 1981 |

**16. Write a query to get first name of employees who joined in 1987.**

select ENAME from emp where extract(year from hiredate)='1982';

| **ENAME** |
| --- |
| SCOTT |
| MILLER |

**17. Write a query to get employees whose experience is more than 5 years.**

SQL> select ename, trunc(months\_between(sysdate,hiredate)/12) from emp where trunc(months\_between(sysdate,hiredate)/12)>5;

ENAME TRUNC(MONTHS\_BETWEEN(SYSDATE,HIREDATE)/12)

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SMITH 42

ALLEN 42

WARD 42

JONES 42

MARTIN 42

BLAKE 42

CLARK 42

SCOTT 40

KING 41

TURNER 42

ADAMS 40

JAMES 41

FORD 41

MILLER 41

14 rows selected.

**18. Write a query to get employee ID, name, and date, salary of the**

**employees, display salary with $ symbol and thousand separator.**

select empno, ename, hiredate, to\_char(sal, '$999,999.99') Salary from emp;

| **EMPNO** | **ENAME** | **HIREDATE** | **SALARY** |
| --- | --- | --- | --- |
| 7369 | SMITH | 17-DEC-80 | $800.00 |
| 7499 | ALLEN | 20-FEB-81 | $1,600.00 |
| 7521 | WARD | 22-FEB-81 | $1,250.00 |
| 7566 | JONES | 02-APR-81 | $2,975.00 |
| 7654 | MARTIN | 28-SEP-81 | $1,250.00 |
| 7698 | BLAKE | 01-MAY-81 | $2,850.00 |
| 7782 | CLARK | 09-JUN-81 | $2,450.00 |
| 7788 | SCOTT | 09-DEC-82 | $3,000.00 |
| 7839 | KING | 17-NOV-81 | $5,000.00 |
| 7844 | TURNER | 08-SEP-81 | $1,500.00 |
| 7876 | ADAMS | 12-JAN-83 | $1,100.00 |
| 7900 | JAMES | 03-DEC-81 | $950.00 |
| 7902 | FORD | 03-DEC-81 | $3,000.00 |
| 7934 | MILLER | 23-JAN-82 | $1,300.00 |

**19. Write a query to get name, hire date and experience of the employees.**

SQL> select ename, hiredate, trunc(months\_between(sysdate,hiredate)/12) as experience from emp;

ENAME HIREDATE EXPERIENCE

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SMITH 17-DEC-80 42

ALLEN 20-FEB-81 42

WARD 22-FEB-81 42

JONES 02-APR-81 42

MARTIN 28-SEP-81 42

BLAKE 01-MAY-81 42

CLARK 09-JUN-81 42

SCOTT 09-DEC-82 40

KING 17-NOV-81 41

TURNER 08-SEP-81 42

ADAMS 12-JAN-83 40

JAMES 03-DEC-81 41

FORD 03-DEC-81 41

MILLER 23-JAN-82 41

AMRUT 04-OCT-23 0

15 rows selected.

**20. Write a query to get the department no, year, and number of employees**

**joined.**

SQL> select deptno, extract(year from hiredate) as year, count(\*) over(partition by extract(year from hiredate)) cnt from emp;

DEPTNO YEAR CNT

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20 1980 1

30 1981 10

20 1981 10

30 1981 10

30 1981 10

10 1981 10

20 1981 10

10 1981 10

30 1981 10

30 1981 10

30 1981 10

20 1982 2

10 1982 2

20 1983 1

10 2023 1

15 rows selected.