

```

create or replace function fun4(dno number) return varchar
is
    dt date;
    nm varchar(10);
begin
    select cname into nm from customers where doj=all(select min(doj) from
customers where dept=dno) and rownum=1 and dept=dno;
    return nm;

end;
/
-----
create or replace function fun2(cid number,yrs number) return date
is
    retdate date;
begin
    select add_months(doj,12*yrs) into retdate from customers where cno=cid;
    return retdate;
end;
/
-----
create or replace function fun1(a number) return number
is
    sq number;
begin
    sq:=a*a;
    return sq;
end;
/
-----
declare
    res number;
begin
    res:=fun1(7);
    dbms_output.put_line(res);
end;
/
-----
create or replace function fun4(dno number) return varchar
is
    dt date;
    nm varchar(10);
begin
    select cname into nm from customers where doj=all(select min(doj) from
customers where dept=dno) and rownum=1 and dept=dno;
    return nm;

end;
/
-----

```

```

create or replace function fun3(cid number) return number
is
    retdate date;
    days number;
begin
    select add_months(doj,120) into retdate from customers where cno=cid;
    select retdate-doj into days from customers where cno=cid;
    return days;
end;
/

```

```

=====
SQL*Plus: Release 10.2.0.1.0 - Production on Thu Dec 18 08:34:55 2025

```

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```

SQL> connect
Enter user-name: prince
Enter password:
Connected.
SQL> set serveroutput on
SQL> ed c:/oracle/fun1.sql

```

```

SQL> @ c:/oracle/fun1.sql

```

Function created.

```

SQL> ed c:/oracle/fun1.sql

```

```

SQL> ed c:/oracle/fun1.sql

```

```

SQL> select fun1(6) from dual;

```

```

      FUN1(6)
-----
          36

```

```

SQL> ed c:/oracle/fun1call.sql

```

```

SQL> @ c:/oracle/fun1call.sql
49

```

PL/SQL procedure successfully completed.

```

SQL> ed c:/oracle/fun1call.sql

```

```

SQL> select * from customers;

```

```

      CNO CNAME          AMOUNT DOJ          CONTACT          DEPT CITY
-----

```

|           |     |           |      |            |
|-----------|-----|-----------|------|------------|
| 1 Ravi    | 495 | 10-APR-20 | 9983 | 10 Indore  |
| 2 Sumit   | 715 | 13-APR-20 | 8832 | 20 Sagar   |
| 3 Ajay    | 165 | 30-SEP-22 |      | 10 Sagar   |
| 4 Vijay   | 935 | 15-FEB-23 |      | 30 Indore  |
| 5 Sanjay  | 385 | 10-APR-20 |      | 10 Indore  |
| 6 Gourav  | 55  | 03-NOV-25 |      | 20 Sagar   |
| 7 Sourav  | 120 | 06-NOV-25 |      | 10 Sagar   |
| 8 Raja    | 230 | 04-OCT-25 |      | 20 Bhopal  |
| 9 Rani    | 260 | 16-MAY-23 |      | 30 Bhopal  |
| 10 Gaurav | 300 | 15-NOV-25 | 3394 | 40 Gwalior |

10 rows selected.

SQL> ed c:/oracle/fun1.sql

SQL> select fun1(4) from dual;

```

      FUN1(4)
-----
          16

```

SQL> desc dual;

| Name  | Null? | Type        |
|-------|-------|-------------|
| DUMMY |       | VARCHAR2(1) |

SQL> select fun1(4) from customers;

```

      FUN1(4)
-----
          16
          16
          16
          16
          16
          16
          16
          16
          16
          16
          16

```

10 rows selected.

SQL> select fun1(4) from dual;

```

      FUN1(4)
-----
          16

```

SQL> select \* from customers;

| CNO | CNAME  | AMOUNT | DOJ       | CONTACT | DEPT | CITY    |
|-----|--------|--------|-----------|---------|------|---------|
| 1   | Ravi   | 495    | 10-APR-20 | 9983    | 10   | Indore  |
| 2   | Sumit  | 715    | 13-APR-20 | 8832    | 20   | Sagar   |
| 3   | Ajay   | 165    | 30-SEP-22 |         | 10   | Sagar   |
| 4   | Vijay  | 935    | 15-FEB-23 |         | 30   | Indore  |
| 5   | Sanjay | 385    | 10-APR-20 |         | 10   | Indore  |
| 6   | Gourav | 55     | 03-NOV-25 |         | 20   | Sagar   |
| 7   | Sourav | 120    | 06-NOV-25 |         | 10   | Sagar   |
| 8   | Raja   | 230    | 04-OCT-25 |         | 20   | Bhopal  |
| 9   | Rani   | 260    | 16-MAY-23 |         | 30   | Bhopal  |
| 10  | Gaurav | 300    | 15-NOV-25 | 3394    | 40   | Gwalior |

10 rows selected.

SQL> select \* from trains;

| TNO  | NAME   | SOURCE | DESTINATION |
|------|--------|--------|-------------|
| 1001 | A Exp. | Delhi  | Mumbai      |
| 1002 | B Exp. | Delhi  | Hyderabad   |
| 1003 | C Exp. | Indore | Pune        |

SQL> select \* from football;

| TCD | TNAME   | SCORED | AGAINST |
|-----|---------|--------|---------|
| 1   | India   | 10     | 4       |
| 2   | Germany | 9      | 6       |
| 3   | Brazil  | 12     | 8       |
| 4   | Spain   | 3      | 10      |
| 5   | Italy   | 8      | 12      |
| 6   | Japan   | 2      | 9       |

6 rows selected.

SQL> select \* from empl;

| EMPID | EMPNAME | DEPTID | SALARY |
|-------|---------|--------|--------|
| 101   | A       | 10     | 40000  |
| 102   | B       | 10     | 60000  |
| 103   | C       | 20     | 20000  |
| 104   | D       | 30     | 15000  |

SQL> select \* from employee;

select \* from employee

\*

ERROR at line 1:

ORA-00942: table or view does not exist

SQL> select \* from employees;

no rows selected

SQL> select \* from customers;

| CNO | CNAME  | AMOUNT | DOJ       | CONTACT | DEPT | CITY    |
|-----|--------|--------|-----------|---------|------|---------|
| 1   | Ravi   | 495    | 10-APR-20 | 9983    | 10   | Indore  |
| 2   | Sumit  | 715    | 13-APR-20 | 8832    | 20   | Sagar   |
| 3   | Ajay   | 165    | 30-SEP-22 |         | 10   | Sagar   |
| 4   | Vijay  | 935    | 15-FEB-23 |         | 30   | Indore  |
| 5   | Sanjay | 385    | 10-APR-20 |         | 10   | Indore  |
| 6   | Gourav | 55     | 03-NOV-25 |         | 20   | Sagar   |
| 7   | Sourav | 120    | 06-NOV-25 |         | 10   | Sagar   |
| 8   | Raja   | 230    | 04-OCT-25 |         | 20   | Bhopal  |
| 9   | Rani   | 260    | 16-MAY-23 |         | 30   | Bhopal  |
| 10  | Gaurav | 300    | 15-NOV-25 | 3394    | 40   | Gwalior |

10 rows selected.

SQL> ed c:/oracle/fun2.sql

SQL> select add\_months(doj,12\*5) from customers;

ADD\_MONTH

-----  
10-APR-25  
13-APR-25  
30-SEP-27  
15-FEB-28  
10-APR-25  
03-NOV-30  
06-NOV-30  
04-OCT-30  
16-MAY-28  
15-NOV-30

10 rows selected.

SQL> ed c:/oracle/fun2.sql

SQL> @ c:/oracle/fun2.sql

Function created.

SQL> select fun2(1,10) from dual;

FUN2(1,10

-----  
10-APR-30

SQL> ed c:/oracle/fun2.sql

SQL> select \* from customers;

| CNO | CNAME  | AMOUNT | DOJ       | CONTACT | DEPT | CITY    |
|-----|--------|--------|-----------|---------|------|---------|
| 1   | Ravi   | 495    | 10-APR-20 | 9983    | 10   | Indore  |
| 2   | Sumit  | 715    | 13-APR-20 | 8832    | 20   | Sagar   |
| 3   | Ajay   | 165    | 30-SEP-22 |         | 10   | Sagar   |
| 4   | Vijay  | 935    | 15-FEB-23 |         | 30   | Indore  |
| 5   | Sanjay | 385    | 10-APR-20 |         | 10   | Indore  |
| 6   | Gourav | 55     | 03-NOV-25 |         | 20   | Sagar   |
| 7   | Sourav | 120    | 06-NOV-25 |         | 10   | Sagar   |
| 8   | Raja   | 230    | 04-OCT-25 |         | 20   | Bhopal  |
| 9   | Rani   | 260    | 16-MAY-23 |         | 30   | Bhopal  |
| 10  | Gaurav | 300    | 15-NOV-25 | 3394    | 40   | Gwalior |

10 rows selected.

SQL> select between\_days(doj,sysdate) from customers;  
select between\_days(doj,sysdate) from customers  
\*

ERROR at line 1:

ORA-00904: "BETWEEN\_DAYS": invalid identifier

SQL> select days\_between(doj,sysdate) from customers;  
select days\_between(doj,sysdate) from customers  
\*

ERROR at line 1:

ORA-00904: "DAYS\_BETWEEN": invalid identifier

SQL> select sysdate-doj from customers;

SYSDATE-DOJ

-----  
2078.37802  
2075.37802  
1175.37802  
1037.37802  
2078.37802  
44.9550694  
42.3780208  
75.3780208

```
947.378021
33.001331
```

10 rows selected.

```
SQL> select doj,sysdate-doj from customers;
```

| DOJ       | SYSDATE-DOJ |
|-----------|-------------|
| 10-APR-20 | 2078.37823  |
| 13-APR-20 | 2075.37823  |
| 30-SEP-22 | 1175.37823  |
| 15-FEB-23 | 1037.37823  |
| 10-APR-20 | 2078.37823  |
| 03-NOV-25 | 44.9552778  |
| 06-NOV-25 | 42.3782292  |
| 04-OCT-25 | 75.3782292  |
| 16-MAY-23 | 947.378229  |
| 15-NOV-25 | 33.0015394  |

10 rows selected.

```
SQL> select round(sysdate-doj) from customers;
```

| ROUND(SYSDATE-DOJ) |
|--------------------|
| 2078               |
| 2075               |
| 1175               |
| 1037               |
| 2078               |
| 45                 |
| 42                 |
| 75                 |
| 947                |
| 33                 |

10 rows selected.

```
SQL> select round(sysdate-doj,2) from customers;
```

| ROUND(SYSDATE-DOJ,2) |
|----------------------|
| 2078.38              |
| 2075.38              |
| 1175.38              |
| 1037.38              |
| 2078.38              |
| 44.96                |
| 42.38                |

75.38  
947.38  
33

10 rows selected.

SQL> ed c:/oracle/fun2.sql

SQL> ed c:/oracle/fun3.sql

SQL> @ c:/oracle/fun3.sql

Function created.

SQL> select fun3(10) from dual;

FUN3(10)  
-----  
3652

SQL> select 3652/120 from dual;

3652/120  
-----  
30.4333333

SQL> select \* from customers;

| CNO | CNAME  | AMOUNT | DOJ       | CONTACT | DEPT | CITY    |
|-----|--------|--------|-----------|---------|------|---------|
| 1   | Ravi   | 495    | 10-APR-20 | 9983    | 10   | Indore  |
| 2   | Sumit  | 715    | 13-APR-20 | 8832    | 20   | Sagar   |
| 3   | Ajay   | 165    | 30-SEP-22 |         | 10   | Sagar   |
| 4   | Vijay  | 935    | 15-FEB-23 |         | 30   | Indore  |
| 5   | Sanjay | 385    | 10-APR-20 |         | 10   | Indore  |
| 6   | Gourav | 55     | 03-NOV-25 |         | 20   | Sagar   |
| 7   | Sourav | 120    | 06-NOV-25 |         | 10   | Sagar   |
| 8   | Raja   | 230    | 04-OCT-25 |         | 20   | Bhopal  |
| 9   | Rani   | 260    | 16-MAY-23 |         | 30   | Bhopal  |
| 10  | Gaurav | 300    | 15-NOV-25 | 3394    | 40   | Gwalior |

10 rows selected.

SQL> select add\_months(doj,120) from customers where cno=10;

ADD\_MONTH  
-----  
15-NOV-35

SQL> select add\_months(doj,120)-doj from customers where cno=10;



```
ADD_MONTHS(DOJ,120)-DOJ
```

```
-----  
3652
```

```
SQL> select add_months(doj,120) from customers where cno=;  
select add_months(doj,120) from customers where cno=  
*
```

```
ERROR at line 1:  
ORA-00936: missing expression
```

```
SQL> select add_months(doj,120) from customers where cno=7;
```

```
ADD_MONTH
```

```
-----  
06-NOV-35
```

```
SQL> select add_months(doj,120)-doj from customers where cno=7;
```

```
ADD_MONTHS(DOJ,120)-DOJ
```

```
-----  
3652
```

```
SQL> select fun3(7) from dual;
```

```
FUN3(7)
```

```
-----  
3652
```

```
SQL> ed c:/oracle/p4.sql
```

```
SQL> @ c:/oracle/p4.sql
```

```
Function created.
```

```
SQL> select * from customers;
```

| CNO | CNAME  | AMOUNT | DOJ       | CONTACT | DEPT | CITY    |
|-----|--------|--------|-----------|---------|------|---------|
| 1   | Ravi   | 495    | 10-APR-20 | 9983    | 10   | Indore  |
| 2   | Sumit  | 715    | 13-APR-20 | 8832    | 20   | Sagar   |
| 3   | Ajay   | 165    | 30-SEP-22 |         | 10   | Sagar   |
| 4   | Vijay  | 935    | 15-FEB-23 |         | 30   | Indore  |
| 5   | Sanjay | 385    | 10-APR-20 |         | 10   | Indore  |
| 6   | Gourav | 55     | 03-NOV-25 |         | 20   | Sagar   |
| 7   | Sourav | 120    | 06-NOV-25 |         | 10   | Sagar   |
| 8   | Raja   | 230    | 04-OCT-25 |         | 20   | Bhopal  |
| 9   | Rani   | 260    | 16-MAY-23 |         | 30   | Bhopal  |
| 10  | Gaurav | 300    | 15-NOV-25 | 3394    | 40   | Gwalior |

10 rows selected.

```
SQL> select fun4(10) from dual;  
select fun4(10) from dual  
      *
```

ERROR at line 1:

ORA-01422: exact fetch returns more than requested number of rows

ORA-06512: at "PRINCE.FUN4", line 6

```
SQL> select fun4(20) from dual;
```

FUN4(20)

-----  
Sumit

```
SQL> select fun4(30) from dual;
```

FUN4(30)

-----  
Vijay

```
SQL> @ c:/oracle/p4.sql
```

Function created.

```
SQL> ed c:/oracle/p4.sql
```

```
SQL> @ c:/oracle/p4.sql
```

Function created.

```
SQL> select fun4(10) from dual;  
select fun4(10) from dual  
      *
```

ERROR at line 1:

ORA-01422: exact fetch returns more than requested number of rows

ORA-06512: at "PRINCE.FUN4", line 6

```
SQL> ed c:/oracle/p4.sql
```

```
SQL> select cname into nm from customers where doj=all(select min(doj) from  
  2  customers where dept=20);  
select cname into nm from customers where doj=all(select min(doj) from  
      *
```

ERROR at line 1:

ORA-00905: missing keyword

```
SQL> select cname from customers where doj=all(select min(doj) from
2 customers where dept=20);
```

CNAME

-----

Sumit

```
SQL> select min(doj) from
2 customers where dept=20;
```

MIN(DOJ)

-----  
13-APR-20

```
SQL> select min(doj) from
2 customers where dept=10;
```

MIN(DOJ)

-----  
10-APR-20

```
SQL> select cname from customers where doj='10-Apr-2020';
```

CNAME

-----

Ravi

Sanjay

```
SQL> ed c:/oracle/p4.sql
```

```
SQL> select rownum from customers;
```

ROWNUM

-----

1

2

3

4

5

6

7

8

9

10

10 rows selected.

```
SQL> select rownum,source from trains;
```

ROWNUM SOURCE

```
-----  
1 Delhi  
2 Delhi  
3 Indore
```

SQL> ed c:/oracle/p4.sql

SQL> select rownum,cname from customers where dept=10;

ROWNUM CNAME

```
-----  
1 Ravi  
2 Ajay  
3 Sanjay  
4 Sourav
```

SQL> select rownum,cname from customers where dept=30;

ROWNUM CNAME

```
-----  
1 Vijay  
2 Rani
```

SQL> ed c:/oracle/p4.sql

SQL> select \* from customers fetch first 1 rows only;  
select \* from customers fetch first 1 rows only  
\*

ERROR at line 1:  
ORA-00933: SQL command not properly ended

SQL> select \* from customers limit 2;  
select \* from customers limit 2  
\*

ERROR at line 1:  
ORA-00933: SQL command not properly ended

SQL> ed c:/oracle/p4.sql

SQL> @ c:/oracle/p4.sql

Function created.

SQL> select fun4(10) from dual;  
select fun4(10) from dual  
\*

ERROR at line 1:

ORA-01422: exact fetch returns more than requested number of rows  
ORA-06512: at "PRINCE.FUN4", line 6

SQL> ed c:/oracle/p4.sql

SQL> @ c:/oracle/p4.sql

Function created.

SQL> select fun4(10) from dual;

FUN4(10)

-----  
Ravi

SQL> ed c:/oracle/p4.sql

SQL> ed c:/oracle/p4.sql