EX 3. BUILT-IN FUNCTIONS

1. Find the length of the column ‘Designation’ Command:

```
select length(designation) from employee;
```

Answer:

```
LENGTH(DESIGNATION)
-------------------
                  5
                  8
                 10
                 10
                  7
                  7

6 rows selected.
```

2. Display the first three characters of Department name Command:

```
select substr(depname,1,3) as dept_initial from department;
```

Answer:

```
DEPT_INITIAL
------------
sal
pur
pro
mar
acc
```

3. Change all ‘BlockA’ in Deplocation column as ‘blockf’ Command:

```
update department
set deplocation = 'blockf'
where deplocation = 'blocka';
```

Answer:

```
2 rows updated.
```

4. Remove the ‘0’s in the strings ‘ABC0000’, ‘000ABC’ Command:

```
select replace('abc0000', '0', '') as result1,
       replace('000abc', '0', '') as result2
from dual;
```

Answer:

```
RES RES
--- ---
abc abc
```

5. Display the distinct Designations in title case Command:

```
select initcap(designation) as title_case_designation
from employee
group by designation;
```

Answer:

```
TITLE_CASE
----------
Clerk
Salesman
Programmer
Accountant
Officer
Analyst

6 rows selected.
```

6. Display the Depname in lower case Command:

```
select lower(depname) as lowercase_depname
from department;
```

Answer:

```
LOWERCASE_DEPNA
---------------
sales
purchase
production
marketing
accounts
```

7. Display the Deplocation in upper case Command:

```
select upper(deplocation) as uppercase_deplocation
from department;
```

Answer:

```
UPPERCASE_DEPLO
---------------
BLOCKF
BLOCKD
BLOCKB
BLOCKF
BLOCKC
```

8. Translate Grade to the corresponding designation Command:

```
select empname,
       grade,
       case grade
         when 'A' then 'manager'
         when 'B' then 'officer'
         when 'C' then 'analyst'
         when 'D' then 'clerk'
         else 'unknown'
       end as designation
from employee;
```

Answer:

```
EMPNAME              G DESIGNA
-------------------- - -------
raju                 E unknown
ram                  F unknown
velu                 D clerk
ravi                 G unknown
mahesh               B officer
kumar                C analyst

6 rows selected.
```

9. Find the total number of employees Command:

```
select count(*) as total_employees
from employee;
```

Answer:

```
TOTAL_EMPLOYEES
---------------
              6
```

10. Find the employee with maximum salary, minimum salary in each department in the ascending order of depno Command:

```
select depno,
       max(salary) as max_salary,
       min(salary) as min_salary
from employee
group by depno
order by depno asc;
```

Answer:

```
DEPNO MAX_SALARY MIN_SALARY
---------- ---------- ----------
         1    3000.25    3000.25
         2       7000       7000
         4    10000.5    10000.5
         5      14500    8000.25
```

11. Find the total salary paid to the employees Command:

```
select sum(salary) as total_salary
from employee;
```

Answer:

```
TOTAL_SALARY
------------
    52501.25
```

12. Find the average salary paid to the employees Command:

```
select avg(salary) as avg_salary
from employee;
```

Answer:

```
AVG_SALARY
----------
8750.20833
```

13. Display the rounded value of the ‘salary’ column in ‘Employee’ table Command:

```
select round(salary) as rounded_salary
from employee;
```

Answer:

```
ROUNDED_SALARY
--------------
          7000
          3000
         10000
          8000
         10001
         14500

6 rows selected.
```

14. Display the salary such that it contains no decimal places Command:

```
select trunc(salary) as salary_no_decimal
from employee;
```

Answer:

```
SALARY_NO_DECIMAL
-----------------
             7000
             3000
            10000
             8000
            10000
            14500

6 rows selected.
```

15. Display the system date in the format mentioned below “27th October 1996” Command:

```
select to_char(sysdate, 'ddth Month yyyy') as system_date
from dual;
```

Answer:

```
SYSTEM_DATE
-------------------------------------------
14th March     2025
```

16. Display “20th September 1996” in the date format Command:

```
SELECT TO_DATE('20 September 1996', 'dd Month yyyy') AS formatted_date
FROM dual;
```

Answer:

```
FORMATTED
---------
20-SEP-96
```

17. Display the date two months after the date-of-join for all the employees Command:

```
select empname,
       datejoin,
       add_months(datejoin, 2) as date_after_2_months
from employee;
```

Answer:

```
EMPNAME              DATEJOIN  DATE_AFTE
-------------------- --------- ---------
raju                 30-NOV-89 31-JAN-90
ram                  08-DEC-00 08-FEB-01
velu                 24-FEB-02 24-APR-02
ravi                 12-SEP-91 12-NOV-91
mahesh               18-MAR-97 18-MAY-97
kumar                15-JAN-95 15-MAR-95

6 rows selected.
```

18. Display the next occurrence of ‘Friday’ to the current date Command:

```
select next_day(sysdate, 'Friday') as next_friday
from dual;
```

Answer:

```
NEXT_FRID
---------
21-MAR-25
```

19. Display the first day of the year 2000 Command:

```
select to_date('01-JAN-2000', 'DD-MON-YYYY') as first_day_of_year_2000
from dual;
```

Answer:

```
FIRST_DAY
---------
01-JAN-00
```