

Ex. No: 4**SQL inbuilt functions****Date: 08/02/22****AIM:** To write SQL queries to execute different inbuilt functions.

Data base created for this exercise is:

ID	EMPNAME	EMPLNAME	EMPBDAY	SALARY	STATIONID
101	a	b	31-MAY-98	50000	2341
102	c	d	21-JUN-88	50000	2346
103	e	f	25-JUL-84	60000	2341
104	g	h	15-AUG-90	60000	2343
105	i	j	15-JAN-82	65000	2343

Inbuilt functions:

- **ASCII** - Used to find ASCII values for the first character of the string.

Syntax,**select col_name, ASCII(col_name) from table_name;**

Example,

SQL> select empname, ASCII(empname) as code_of_first_char_of_fname from employee;

EMPNAME CODE_OF_FIRST_CHAR_OF_FNAME

a	97
c	99
e	101
g	103
i	105

- **CONCAT** - Used to concat/merge two strings.

Syntax,**select concat (col1,col2) from table_name;**

Example,

SQL> select concat (empname,emplname)empname from employee;

EMPNAME

ab
cd
ef
gh
lj

- **UPPER** - Used to make all characters in the string to upper case.

Syntax,

select upper(col_name) from table_name;

Example,

SQL> select upper(empfname) from employee;

UPPER(EMPFNAME)

A

C

E

G

I

- **COUNT** - Used to count records in the table.

Syntax,

select count(col_name) from table_name;

Example,

SQL> select count(id) from employee;

COUNT(ID)

5

- **LTRIM** - Used to trim left spaces from a string.

Syntax,

select ltrim(col_name) from table_name;

Example,

SQL> select ltrim(empfname) from employee;

LTRIM(EMPFNAME)

a

c

e

g

i

K

- **REPLACE** - Used to replace characters in a string.

Syntax,

select replace(col_name,'original_substring','new_substring') from table_name;

Example,

```
SQL> select replace(empfname,'m','x') from employee where id = 107;
```

```
REPLACE(EMPFNAME,'M','X')
```

```
-----
```

```
xnx
```

- **ADD_MONTHS** - Used to get next or previous months from a date.

Syntax,

```
SELECT col_name, add_months(col_name,number_to_add_to_month) FROM table_name;
```

Example,

```
SQL> select empbday, add_months(empbday,1) from employee;
```

```
EMPBDAY  ADD_MONTH
```

```
-----
```

```
31-MAY-98 30-JUN-98
```

```
21-JUN-88 21-JUL-88
```

```
25-JUL-84 25-AUG-84
```

```
15-AUG-90 15-SEP-90
```

```
15-JAN-82 15-FEB-82
```

```
17-FEB-84 17-MAR-84
```

```
17-FEB-84 17-MAR-84
```

7 rows selected.

- **EXTRACT** - Used to get day/month/year from a date.

Syntax,

```
SELECT col_name, extract(col_name) FROM table_name;
```

Example,

```
SQL> select empbday, extract(year from empbday)year from employee;
```

```
EMPBDAY      YEAR
```

```
-----
```

```
31-MAY-98    1998
```

```
21-JUN-88    1988
```

```
25-JUL-84    1984
```

```
15-AUG-90    1990
```

```
15-JAN-82    1982
```

```
17-FEB-84    1984
```

```
17-FEB-84    1984
```

7 rows selected.

```
SQL> create table employee(id int, empfname varchar(30), emplname varchar(30), empbday date, salary int, stationid int);
```

Table created.

```
SQL> insert into employee values(101, 'a', 'b', '31-may-98', 50000, 2341);
```

1 row created.

```
SQL> insert into employee values(102, 'c', 'd', '21-jun-88', 50000, 2346);
```

1 row created.

```
SQL> insert into employee values(103, 'e', 'f', '25-jul-84', 60000, 2341);
```

1 row created.

```
SQL> insert into employee values(104, 'g', 'h', '15-aug-90', 60000, 2343);
```

1 row created.

```
SQL> insert into employee values(105, 'i', 'j', '15-jan-82', 65000, 2343);
```

1 row created.

```
SQL> select * from employee;
```

ID	EMPFNAME	EMPLNAME	EMPBDAY	SALARY	STATIONID
101	a	b	31-MAY-98	50000	2341
102	c	d	21-JUN-88	50000	2346
103	e	f	25-JUL-84	60000	2341
104	g	h	15-AUG-90	60000	2343
105	i	j	15-JAN-82	65000	2343

```
SQL> select empfname, ASCII(empfname) as code_of_first_char_of_fname from employee;
```

EMPFNAME CODE_OF_FIRST_CHAR_OF_FNAME

a	97
c	99
e	101
g	103
i	105

SQL> select concat (empfname,emplname)empname from employee;

EMPNAME

ab
cd
ef
gh
ij

SQL> select upper(empfname) from employee;

UPPER(EMPFNAME)

A
C
E
G
I

SQL> select count(id) from employee;

COUNT(ID)

5

SQL> insert into employee values(106, ' k', 'l ', '17-feb-84', 55000, 2343);

1 row created.

```
SQL> select * from employee;
```

ID	EMPFNAME	EMPLNAME	EMPBDAY	SALARY	STATIONID
101	a	b	31-MAY-98	50000	2341
102	c	d	21-JUN-88	50000	2346
103	e	f	25-JUL-84	60000	2341
104	g	h	15-AUG-90	60000	2343
105	i	j	15-JAN-82	65000	2343
106	k	l	17-FEB-84	55000	2343

6 rows selected.

```
SQL> select ltrim(empfname) from employee;
```

LTRIM(EMPFNAME)
a
c
e
g
i
k

6 rows selected.

```
SQL> insert into employee values(107, 'mnm', 'opp', '17-feb-84', 55000, 2343);
```

1 row created.

```
SQL> select replace(empfname,'m','x') from employee where id = 107;
```

REPLACE(EMPFNAME,'M','X')
xnx

```
SQL> select empbday, add_months(empbday,1) from employee;
```

EMPBDAY ADD_MONTH

31-MAY-98 30-JUN-98

21-JUN-88 21-JUL-88

25-JUL-84 25-AUG-84

15-AUG-90 15-SEP-90

15-JAN-82 15-FEB-82

17-FEB-84 17-MAR-84

17-FEB-84 17-MAR-84

7 rows selected.

SQL> select empbday, extract(year from empbday)year from employee;

EMPBDAY YEAR

31-MAY-98 1998

21-JUN-88 1988

25-JUL-84 1984

15-AUG-90 1990

15-JAN-82 1982

17-FEB-84 1984

17-FEB-84 1984

7 rows selected.

SQL> spool off

Result:

Thus the inbuilt functions are used to modify or manipulate data records present in the employee table.