EXP-6

Row Functions

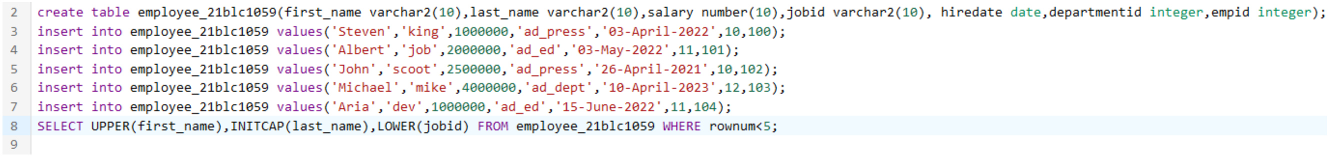
21BLC1059

Govind Sankar H

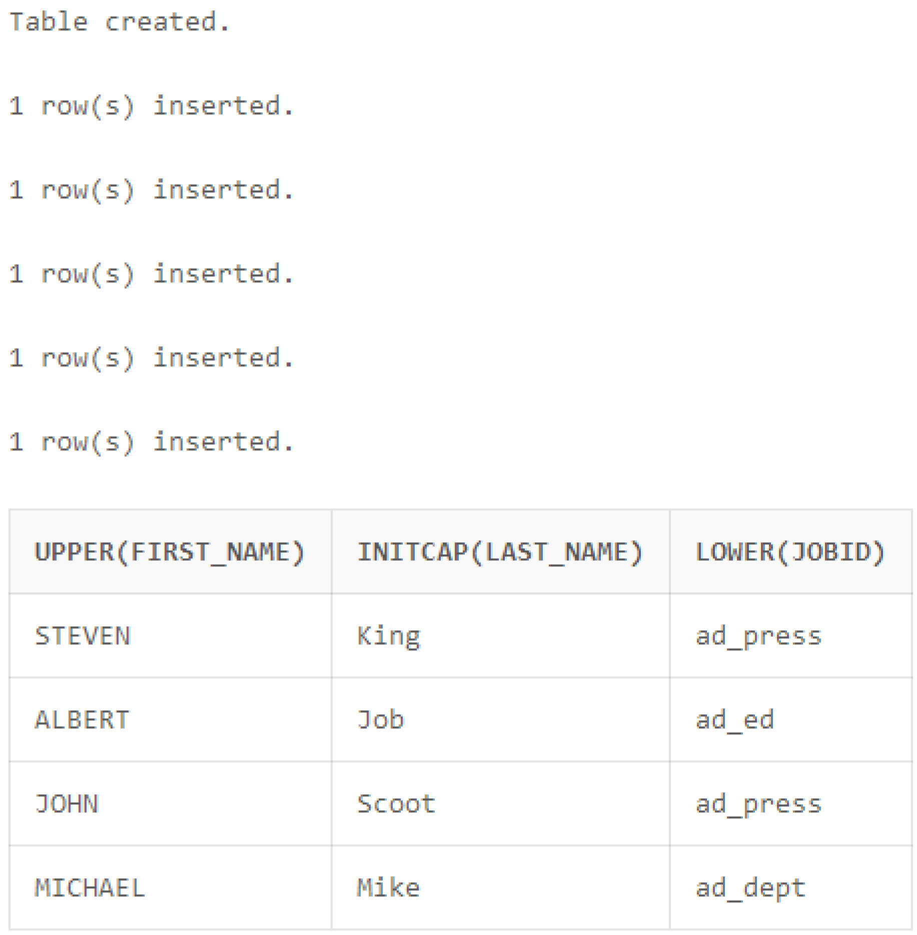
Row functions can be divided into to :
Single Row functions - Single row functions are the one who work on single row and return one output per row. For example, length and case conversion functions are single row functions.Single row functions can be character functions, numeric functions, date functions, and conversion functions. Note that these functions are used to manipulate data items. These functions require one or more input arguments and operate on each row, thereby returning one output value for each row. Argument can be a column, literal or an expression. Single row functions can be used in SELECT statement, WHERE and ORDER BY clause.

Multiple Row functions - Multiple row functions work upon group of rows and return one result for the complete set of rows. They are also known as Group Functions.

Case Conversion functions
SELECT UPPER (first_name), INITCAP (last_name), LOWER (job_id) FROM employees WHERE rownum < 5;



```
create table employee_21blc1059(first_name varchar2(10),last_name varchar2(10),salary number(10),jobid varchar2(10), hiredate date,departmentid integer,empid integer);
insert into employee_21blc1059 values('Steven','king',1000000,'ad_press','03-April-2022',10,100);
insert into employee_21blc1059 values('Albert','job',2000000,'ad_ed','03-May-2022',11,101);
insert into employee_21blc1059 values('John','scoot',2500000,'ad_press','26-April-2021',10,102);
insert into employee_21blc1059 values('Michael','mike',4000000,'ad_dept','10-April-2023',12,103);
insert into employee_21blc1059 values('Aria','dev',1000000,'ad_ed','15-June-2022',11,104);
SELECT UPPER(first_name),INITCAP(last_name),LOWER(jobid) FROM employee_21blc1059 WHERE rownum<5;

```

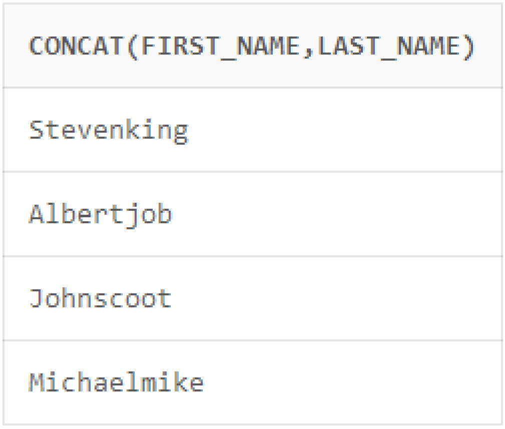


```
Table created.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

UPPER(FIRST_NAME)	INITCAP(LAST_NAME)	LOWER(JOBID)
STEVEN	King	ad_press
ALBERT	Job	ad_ed
JOHN	Scoot	ad_press
MICHAEL	Mike	ad_dept

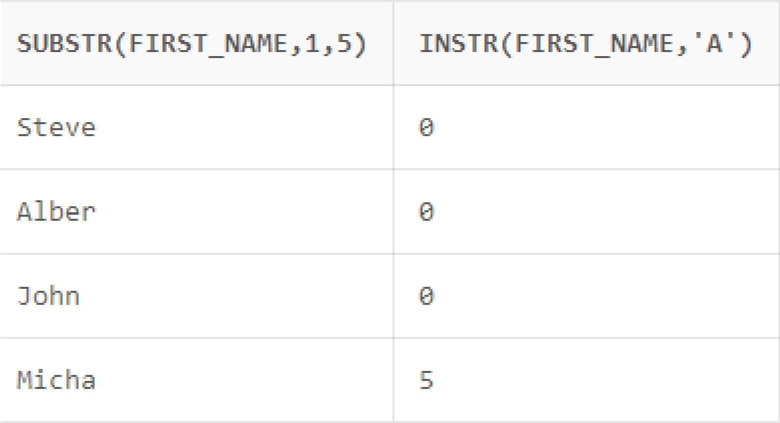
Character functions

SELECT CONCAT (first_name, last_name) FROM employees WHERE rownum < 5;



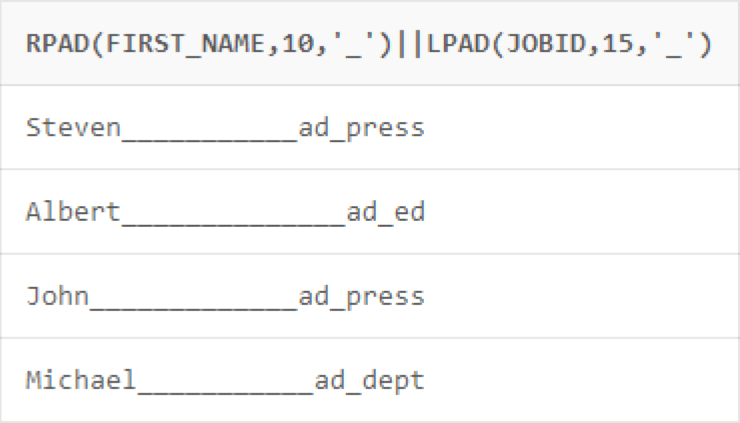
CONCAT(FIRST_NAME,LAST_NAME)
Stevenking
Albertjob
Johnscoot
Michaelmike

SELECT SUBSTR (first_name,1,5), INSTR (first_name,'a') FROM employees WHERE rownum < 5;



SUBSTR(FIRST_NAME,1,5)	INSTR(FIRST_NAME,'A')
Steve	0
Alber	0
John	0
Micha	5

SELECT RPAD(first_name,10,'_')||LPAD (job_id,15,'_') FROM employees WHERE rownum < 5;

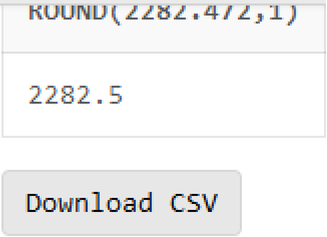


RPAD(FIRST_NAME,10,'_')||LPAD(JOBID,15,'_')
Steven___________ad_press
Albert______________ad_ed
John_____________ad_press
Michael___________ad_dept

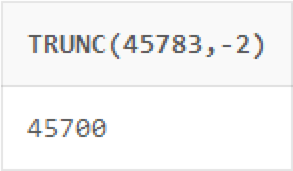
Number functions

SELECT ROUND (1372.472,1) FROM dual;

SELECT TRUNC (72183,-2)FROM dual;



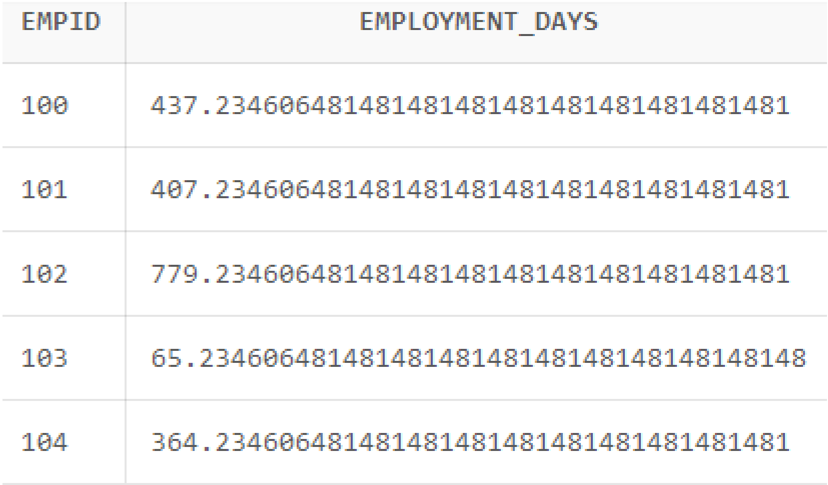
ROUND(2282.472,1)
2282.5



TRUNC(45783,-2)
45700

Date arithmetic operations

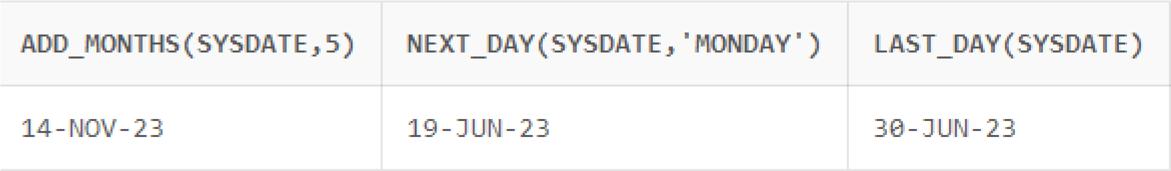
SELECT employee_id, (sysdate - hire_date) Employment_days FROM employees WHERE rownum < 5;



EMPID	EMPLOYMENT_DAYS
100	437.2346064814814814814814814814814814814 81
101	407.234606481481481481481481481481481481
102	779.234606481481481481481481481481481481
103	65.23460648148148148148148148148148148148
104	364.234606481481481481481481481481481481

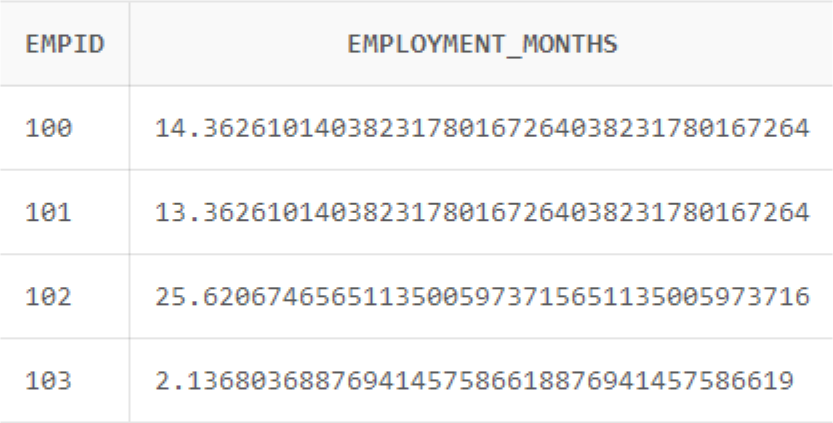
Date functions

SELECT ADD_MONTHS (sysdate, 5), NEXT_DAY (sysdate), LAST_DAY (sysdate) FROM dual;

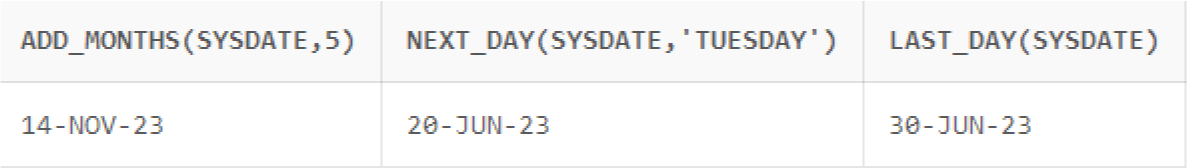


ADD_MONTHS(SYSDATE,5)	NEXT_DAY(SYSDATE,'MONDAY')	LAST_DAY(SYSDATE)
14-NOV-23	19-JUN-23	30-JUN-23

SELECT employee_id, MONTHS_BETWEEN (sysdate, hire_date) Employment_months FROM employees WHERE rownum < 5;

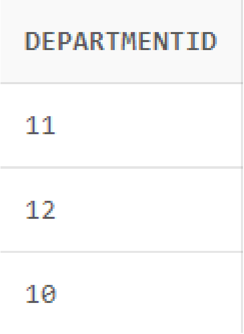


EMPID	EMPLOYMENT_MONTHS
100	14.362610140382317801672640382317801672664
101	13.362610140382317801672640382317801672664
102	25.620674656511350059737156511350059737 16
103	2.136803688769414575866188769414575866 19



ADD_MONTHS(SYSDATE,5)	NEXT_DAY(SYSDATE,'TUESDAY')	LAST_DAY(SYSDATE)
14-NOV-23	20-JUN-23	30-JUN-23

SELECT DISTINCT DEPARTMENT_ID FROM employees;

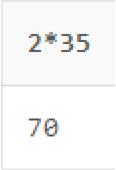


DEPARTMENTID
11
12
10

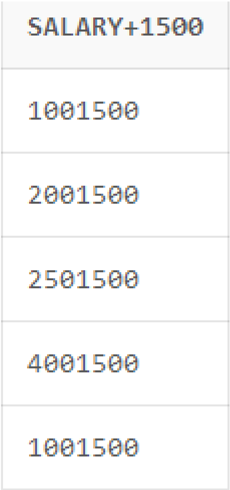
Arithmetic operators

SELECT 2*35 FROM DUAL;

SELECT salary + 1500 FROM employees;



2*35
70



SALARY+1500
1001500
2001500
2501500
4001500
1001500