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SQL Worksheet

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Script Results

from emp

order by sal

EMPNO	ENAME	JOB	SAL	SAL_
7369	SMITH	CLERK	800	1
7900	JAMES	CLERK	950	2
7876	ADAMS	CLERK	1100	3
7521	WARD	SALESMAN	1250	4
7654	MARTIN	SALESMAN	1250	5
7934	MILLER	CLERK	1300	6
7844	TURNER	SALESMAN	1500	7
7499	ALLEN	SALESMAN	1600	8
7782	CLARK	MANAGER	2450	9
7698	BLAKE	MANAGER	2850	10
7566	JONES	MANAGER	2975	11

Code Library \ A

Description

Area

Contributor

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Metrics

Statement 1

Statement 2

create table emp (
EMPNO NUMBER(4) ,
ENAME VARCHAR2(10) ,
JOB VARCHAR2(9) ,
MGR NUMBER(4) ,
HIREDATE DATE ,
SAL NUMBER(7,2) ,
COMM NUMBER(7,2) ,
DEPTNO NUMBER(2))
)

Table created.

Statement 3

Insert into emp (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO

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We're creati
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LiveSQL, bu
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https://livesql.oracle.com/apex/f?p=590:41:104226669769962:::41:P41_ID:51834959113769697254577434811815326821

1/7

	1 row(s) inserted.
Statement 4	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 5	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 6	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 7	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 8	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 9	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 10	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>
Statement 11	<div>Insert into emp (EMPNO,ENAME, JOB,MGR,HIREDATE, SAL,COMM,DEPTNO)</div> <div><div></div></div> <div>1 row(s) inserted.</div>

Statement 12	<div><div>Insert into emp (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTI</div><div><div></div></div><div>1 row(s) inserted.</div></div>																																				
Statement 13	<div><div>Insert into emp (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTI</div><div><div></div></div><div>1 row(s) inserted.</div></div>																																				
Statement 14	<div><div>Insert into emp (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTI</div><div><div></div></div><div>1 row(s) inserted.</div></div>																																				
Statement 15	<div><div>Insert into emp (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTI</div><div><div></div></div><div>1 row(s) inserted.</div></div>																																				
Statement 16	<div><div>Insert into emp (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTI</div><div><div></div></div><div>1 row(s) inserted.</div></div>																																				
Statement 17	<div><div>commit</div><div>Statement processed.</div></div>																																				
Statement 18	<div><div><div>select empno, ename, job, hiredate, sal from emp order by sal</div><div>Here is our ordered by</div><table><tr><th>EMPNO</th><th>ENAME</th><th>JOB</th><th>HIREDATE</th></tr><tr><td>7369</td><td>SMITH</td><td>CLERK</td><td>17-DEC-80</td></tr><tr><td>7900</td><td>JAMES</td><td>CLERK</td><td>03-DEC-81</td></tr><tr><td>7876</td><td>ADAMS</td><td>CLERK</td><td>12-JAN-83</td></tr><tr><td>7521</td><td>WARD</td><td>SALESMAN</td><td>22-FEB-81</td></tr><tr><td>7654</td><td>MARTIN</td><td>SALESMAN</td><td>28-SEP-81</td></tr><tr><td>7934</td><td>MILLER</td><td>CLERK</td><td>23-JAN-82</td></tr><tr><td>7844</td><td>TURNER</td><td>SALESMAN</td><td>08-SEP-81</td></tr><tr><td></td><td></td><td></td><td></td></tr></table></div></div>	EMPNO	ENAME	JOB	HIREDATE	7369	SMITH	CLERK	17-DEC-80	7900	JAMES	CLERK	03-DEC-81	7876	ADAMS	CLERK	12-JAN-83	7521	WARD	SALESMAN	22-FEB-81	7654	MARTIN	SALESMAN	28-SEP-81	7934	MILLER	CLERK	23-JAN-82	7844	TURNER	SALESMAN	08-SEP-81				
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7844	TURNER	SALESMAN	08-SEP-81																																		

7499	ALLEN	SALESMAN	20-FEB-81
7782	CLARK	MANAGER	09-JUN-81
7698	BLAKE	MANAGER	01-MAY-81
7566	JONES	MANAGER	02-APR-81
7788	SCOTT	ANALYST	09-DEC-82
7902	FORD	ANALYST	03-DEC-81
7839	KING	PRESIDENT	17-NOV-81

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14 rows selected.

Statement 19

```
select empno, ename, job, hiredate, sal,
       rank() OVER (order by hiredate) as hire_rank
from emp
order by sal
```

And a recap
function fro



EMPNO	ENAME	JOB	HIREDATE	SAL
7369	SMITH	CLERK	17-DEC-80	800
7900	JAMES	CLERK	03-DEC-81	950
7876	ADAMS	CLERK	12-JAN-83	1100
7521	WARD	SALESMAN	22-FEB-81	1250
7654	MARTIN	SALESMAN	28-SEP-81	1250
7934	MILLER	CLERK	23-JAN-82	1300
7844	TURNER	SALESMAN	08-SEP-81	1500
7499	ALLEN	SALESMAN	20-FEB-81	1600
7782	CLARK	MANAGER	09-JUN-81	2450
7698	BLAKE	MANAGER	01-MAY-81	2850
7566	JONES	MANAGER	02-APR-81	2975
7902	FORD	ANALYST	03-DEC-81	3000
7788	SCOTT	ANALYST	09-DEC-82	3000
7839	KING	PRESIDENT	17-NOV-81	5000

[Download CSV](#)

14 rows selected.

Statement 20

```
select empno, ename, job, sal
from emp
order by sal
```

EMPNO	ENAME	JOB
7369	SMITH	CLERK
7900	JAMES	CLERK
7876	ADAMS	CLERK
7521	WARD	SALESMAN

7654	MARTIN	SALESMAN
7934	MILLER	CLERK
7844	TURNER	SALESMAN
7499	ALLEN	SALESMAN
7782	CLARK	MANAGER
7698	BLAKE	MANAGER
7566	JONES	MANAGER
7788	SCOTT	ANALYST
7902	FORD	ANALYST
7839	KING	PRESIDENT

[Download CSV](#)

14 rows selected.

Statement 21

```
select empno, ename, job, sal,
       rank() OVER (order by sal) as sal_rank,
       dense_rank() OVER (order by sal) as sal_dense_rank
from emp
order by sal
```

Now we can use RANK and DENSE_RANK functions with tied values in sequence

EMPNO	ENAME	JOB	SAL	SAL_RANK	SAL_DENSE_RANK
7369	SMITH	CLERK	800	1	1
7900	JAMES	CLERK	950	2	2
7876	ADAMS	CLERK	1100	3	3
7521	WARD	SALESMAN	1250	4	4
7654	MARTIN	SALESMAN	1250	4	4
7934	MILLER	CLERK	1300	6	5
7844	TURNER	SALESMAN	1500	7	6
7499	ALLEN	SALESMAN	1600	8	7
7782	CLARK	MANAGER	2450	9	8
7698	BLAKE	MANAGER	2850	10	9
7566	JONES	MANAGER	2975	11	10
7788	SCOTT	ANALYST	3000	12	11
7902	FORD	ANALYST	3000	12	11
7839	KING	PRESIDENT	5000	14	12

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14 rows selected.

Statement 22

```
select empno, ename, job, sal,
       row_number() OVER (order by sal) as row_num
from emp
order by sal
```

Here is the ROW_NUMBER() function which assigns a unique number to each row if there are ties

values, the s
be indetermin

EMPNO	ENAME	JOB	SAL	SAL_ROI
7369	SMITH	CLERK	800	1
7900	JAMES	CLERK	950	2
7876	ADAMS	CLERK	1100	3
7521	WARD	SALESMAN	1250	4
7654	MARTIN	SALESMAN	1250	5
7934	MILLER	CLERK	1300	6
7844	TURNER	SALESMAN	1500	7
7499	ALLEN	SALESMAN	1600	8
7782	CLARK	MANAGER	2450	9
7698	BLAKE	MANAGER	2850	10
7566	JONES	MANAGER	2975	11
7788	SCOTT	ANALYST	3000	12
7902	FORD	ANALYST	3000	13
7839	KING	PRESIDENT	5000	14

[Download CSV](#)
14 rows selected.

Statement 23

```
select empno, ename, job, sal,  
       row_number() OVER (order by sal, empno  
from emp  
order by sal
```

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EMPNO	ENAME	JOB	SAL	SAL_ROI
7369	SMITH	CLERK	800	1
7900	JAMES	CLERK	950	2
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7844	TURNER	SALESMAN	1500	7
7499	ALLEN	SALESMAN	1600	8
7782	CLARK	MANAGER	2450	9
7698	BLAKE	MANAGER	2850	10
7566	JONES	MANAGER	2975	11
7788	SCOTT	ANALYST	3000	12
7902	FORD	ANALYST	3000	13

	7839	KING	PRESIDENT	5000	14
Download CSV					
14 rows selected.					

