**Slides**

Statement 1:

**SELECT AVG(sal), MAX(sal),**

**MIN(sal), SUM(sal)**

**FROM emp**

**WHERE job LIKE 'SALES%'**

Result:

|  |  |  |  |
| --- | --- | --- | --- |
| **AVG(SAL)** | **MAX(SAL)** | **MIN(SAL)** | **SUM(SAL)** |
| 1285.29412 | 1600 | 1250 | 21850 |

Statement 2:

**SELECT MIN(hiredate), MAX(hiredate)**

**FROM emp*;***

Result:

|  |  |
| --- | --- |
| **MIN(HIRED** | **MAX(HIRED** |
| 17-DEC-80 | 12-JAN-83 |

Statement 3:

SELECT COUNT(\*)

FROM emp

WHERE deptno = 30;

Result:

|  |
| --- |
| **COUNT(\*)** |
| 30 |

Statement 4:

SELECT COUNT(comm)

FROM emp

WHERE deptno = 30;

Result:

|  |
| --- |
| **COUNT(COMM)** |
| 17 |

Statement 5:

SELECT AVG(comm)

FROM emp;

Result:

|  |
| --- |
| **AVG(COMM)** |
| 935.294118 |

Statement 6:

**SELECT AVG(NVL(comm,0))**

**FROM emp;**

Result:

|  |
| --- |
| **AVG(NVL(COMM,0))** |
| 407.692308 |

Statement 7:

**SELECT deptno, AVG(sal)**

**FROM emp**

**GROUP BY deptno;**

Result:

|  |  |
| --- | --- |
| **DEPTNO** | **AVG(SAL)** |
| 10 | 2916.66667 |
| 20 | 2308.33333 |
| 30 | 1900 |

Statement 8:

**SELECT AVG(sal)**

**FROM emp**

**GROUP BY deptno;**

Result:

|  |
| --- |
| **AVG(SAL)** |
| 2916.66667 |
| 2308.33333 |
| 1900 |

Statement 9:

**SELECT deptno, job, sum(sal)**

**FROM emp**

**GROUP BY deptno, job;**

Result:

|  |  |  |
| --- | --- | --- |
| **DEPTNO** | **JOB** | **SUM(SAL)** |
| 10 | CLERK | 1300 |
| 10 | MANAGER | 2450 |
| 10 | PRESIDENT | 5000 |
| 20 | CLERK | 1900 |
| 20 | ANALYST | 6000 |
| 20 | MANAGER | 5950 |
| 30 | CLERK | 950 |
| 30 | MANAGER | 34200 |
| 30 | SALESMAN | 21850 |

Statement 10:

**SELECT deptno, max(sal)**

**FROM emp**

**GROUP BY deptno**

**HAVING max(sal)>2900;**

Result:

|  |  |
| --- | --- |
| **DEPTNO** | **MAX(SAL)** |
| 10 | 5000 |
| 20 | 3000 |

Statement 11:

**SELECT job, SUM(sal) PAYROLL**

**FROM emp**

**WHERE job NOT LIKE 'SALES%'**

**GROUP BY job**

**HAVING SUM(sal)>5000**

**ORDER BY SUM(sal);**

Result:

|  |  |
| --- | --- |
| **JOB** | **PAYROLL** |
| ANALYST | 6000 |
| MANAGER | 42600 |

Statement 12:

**SELECT max(avg(sal))**

**FROM emp**

**GROUP BY deptno;**

Result:

|  |
| --- |
| **MAX(AVG(SAL))** |
| 2916.66667 |

Exercise

Statement 4:

SELECT Round(max(sal)) "Maximum" , round(min(sal)) "Minimum" , round(sum(NVL(sal , 0))) "Sum" , round(avg(NVL(sal , 0))) "Average"

FROM emp

Result:

|  |  |  |  |
| --- | --- | --- | --- |
| **Maximum** | **Minimum** | **Sum** | **Average** |
| 5000 | 800 | 79600 | 2041 |

Statement 5:

SELECT job , Round(max(sal)) "Maximum" , round(min(sal)) "Minimum" , round(sum(NVL(sal , 0))) "Sum" , round(avg(NVL(sal , 0))) "Average"

FROM emp

group by job

Result:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **JOB** | **Maximum** | **Minimum** | **Sum** | **Average** |
| ANALYST | 3000 | 3000 | 6000 | 3000 |
| CLERK | 1300 | 800 | 4150 | 1038 |
| MANAGER | 2975 | 2450 | 42600 | 2840 |
| PRESIDENT | 5000 | 5000 | 5000 | 5000 |
| SALESMAN | 1600 | 1250 | 21850 | 1285 |

Statement 6:

SELECT job , count(\*)

from emp

group by job

Result:

|  |  |
| --- | --- |
| **JOB** | **COUNT(\*)** |
| ANALYST | 2 |
| CLERK | 4 |
| MANAGER | 15 |
| PRESIDENT | 1 |
| SALESMAN | 17 |

Statement 7:

SELECT count(mgr) as "Number of Managers"

from emp

Result:

|  |
| --- |
| **Number of Managers** |
| 38 |

Statement 8:

SELECT max(sal) - min(sal) as "Difference"

from emp

Result:

|  |
| --- |
| **Difference** |
| 4200 |

Statement 9:

SELECT mgr , min(sal)

from emp

where mgr is not null

group by mgr

having min(sal) > 999

order by min(sal) desc

Result:

|  |  |
| --- | --- |
| **MGR** | **MIN(SAL)** |
| 7566 | 3000 |
| 7839 | 2450 |
| 7782 | 1300 |
| 7788 | 1100 |

Statement 10:

select d.dname , d.loc , count(\*) as "Number of People" , round(avg(e.sal) , 2) as "salary"

from dept d , emp e

where e.deptno = d.deptno

group by d.dname, d.loc

Result:

|  |  |  |  |
| --- | --- | --- | --- |
| **DNAME** | **LOC** | **Number of People** | **salary** |
| SALES | CHICAGO | 30 | 1900 |
| RESEARCH | DALLAS | 6 | 2308.33 |
| ACCOUNTING | NEW YORK | 3 | 2916.67 |

Statement 11:

select count(\*) total , count(decode(to\_char(hiredate , 'fmYYYY') , '1980' , 1)) as "1980" , count(decode(to\_char(hiredate , 'fmYYYY') , '1981' , 1)) as "1981" , count(decode(to\_char(hiredate , 'fmYYYY') , '1982' , 1)) as "1982" , count(decode(to\_char(hiredate , 'fmYYYY') , '1983' , 1)) as "1983"

from emp

Result:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TOTAL** | **1980** | **1981** | **1982** | **1983** |
| 39 | 1 | 35 | 2 | 1 |