-- Hemyan Al-Kuwari

-- 1-Single-row Functions

-- A

select upper(ename), lower(ename) from emp;

select ename, length(ename) from emp;

select ename, substr(ename,2,3) from emp;

--B

select round(45.923,2), round(45.923,0), round(45.923,-1) from dummy;

select trunc(45.923,2), trunc(45.923), trunc(45.923,-1) from dummy;

--C

select sysdate from DUMMY;

select sysdate+3 from DUMMY;

select sysdate-2 from DUMMY;

select ename,months\_between(sysdate, hiredate)from emp;

select add\_months(sysdate,6) review from dummy;

select add\_months(hiredate,6) review from emp;

--Practice

--1

select ename, round(months\_between(sysdate,hiredate)) Months\_Worked from emp order by Months\_Worked;

--2

select ename, hiredate, TO\_CHAR(hiredate,'Day') from emp;

--D

select ename, to\_char(hiredate,'Day DD Month YYYY') from emp;

select to\_number('123')+4 from dummy;

select ename, hiredate from emp where hiredate = to\_date ('February 22, 1981', 'Month dd,yyyy');

--E

select ename, sal, comm, (sal\*12)+ NVL(comm,0) from emp;

--Practice

select ename, NVL(to\_char(comm),'No Commission') COMM from emp;

-- 2- Multiple-row Functions

-- EXAMPLES

select avg(sal), max(sal), min(sal), sum(sal) from emp where job LIKE 'SALES%';

select count(\*) from emp where deptno=30;

select count(comm) from emp where deptno =30;

select comm from emp;

select avg(comm) from emp; -- it ignore the null field and devided it by 4

select avg(NVL(comm,0)) from emp; -- it could not ignore the null field because its a number. So, it devided by 14

-- Creating Groups Of Data

select deptno, sum(sal), avg(sal) from emp group by deptno;

select deptno, sum(sal) from emp group by deptno having sum(sal)>9000;

-- Example

select job, sum(sal) from emp group by job having sum(sal)<5000;

select job, sum(sal) PAYROLL from emp where job Not LIKE 'SALES%' group by job Order by sum(sal);

-- Practice

--1

select round(max(sal)) Maximum, round(min(sal)) Minimum, round(sum(sal)) Sum, round(avg(sal)) Average from emp;

--2

select job, min(sal), max(sal), sum(sal), avg(sal) from emp group by job;

--3

select job, count(\*) from emp group by job;

--4

select deptno, count(\*) from emp group by deptno having count(\*)<5;