```sql
select months_between('95 -10-21', '94-10-20') from dual;
select WIDTH_BUCKET(74, 0, 100, 10)from dual;--지정된 범위 위치찾기
select rtrim('test   ')|| 'exam' from dual; --공백제거
select sysdate from dual;
select to_char(sysdate, 'YYYY"년" MM"월" DD"일"') as 오늘날짜 from
dual;
select to_char(sysdate, 'HH"시" MI"분" SS"초"') as 오늘날짜 from
dual;
select to_char(sysdate, 'HH24"시" MI"분" SS"초"') as 오늘날짜 from
dual;

select add_months(sysdate, 7)from dual;--날짜에 달수 더하기

select last_day(sysdate)from dual;--해당달의 마지막 날
select last_day('2004-02-01')from dual;
select last_day('2005-02-01')from dual;

select (last_day(sysdate)-sysdate) from dual;--오늘부터 이번 달 말
까지 총 남은 날수를 구하시오

select round(months_between('95-10-21', '94-10-20'),0)from
dual; --두 날짜 사이의 달 수

select LAST_NAME, to_char(SALARY,'L99,999,00') from EMPLOYEES
where LAST_NAME = 'King';

select to_char(to_date('97/9/30', 'YY-MM-DD'), 'YYYY-MON-
DD')from dual;
select to_char(to_date('97/9/30', 'RR-MM-DD'), 'RRRR-MON-
DD')from dual;

select to_char(to_date('17/9/30', 'YY-MM-DD'), 'YYYY-MON-
DD')from dual;
select to_char(to_date('17/9/30', 'RR-MM-DD'), 'RRRR-MON-
DD')from dual;

select LAST_NAME,to_char(HIRE_DATE,'dd-mon-yyyy') from
EMPLOYEES where HIRE_DATE > TO_DATE('1995-01-01', 'YYYY-MM-
DD');

select LAST_NAME, HIRE_DATE from EMPLOYEES where HIRE_DATE=
'96/02/17';
select LAST_NAME, HIRE_DATE from EMPLOYEES where HIRE_DATE=
'96/2/17';

select TO_CHAR(sysdate, 'YYYY-MM-DD')from dual;
select TO_CHAR(sysdate, 'YYYY-fmMM-DD')from dual;--fm은 0을 표시
하지 않음

select to_char(TO_DATE('2011-03-01','YYYY-MM-DD'), 'YYYY-MM-
```

```
DD')from dual;
select to_char(TO_DATE('2011-03-01','YYYY-MM-DD'), 'YYYY-fmMM-
DD')from dual;
select to_char(TO_DATE('2011-03-01','YYYY-MM-DD'), 'YYYY-fmMM-
fmDD')from dual;

select max(SALARY),--최댓값
       min(SALARY),--최솟값
       trunc(avg(SALARY), 0),--평균
       to_char(sum(SALARY),'L9,999,999') from EMPLOYEES;--합

select count(*)-count(PHONE_NUMBER) from EMPLOYEES;
select count(*) from EMPLOYEES where PHONE_NUMBER is null;

select DEPARTMENT_ID from EMPLOYEES; --각 부서아이디 데이터값
select count(DEPARTMENT_ID)from EMPLOYEES;--부서아이디의 개수
select count(*)from EMPLOYEES;--레코드의 개수
select count(distinct DEPARTMENT_ID)from  EMPLOYEES;--부서아이디
중복을 제외한 개수
select count(distinct nvl(DEPARTMENT_ID, 0))from EMPLOYEES;--
null값을 0으로 바꾸고 갯수
select distinct nvl(DEPARTMENT_ID,0)from EMPLOYEES;--중복을 제외
하고 null값을 0으로 바꾼 데이터값

select JOB_ID ,decode(JOB_ID,
               '16','Sales Dept',
               '13','Sales Dept',
               'Another')"분류" from EMPLOYEES order by 2;

SELECT JOB_ID,
       CASE JOB_ID
           WHEN 16 THEN 'Sales Dept'
           WHEN 13 THEN 'Sales Dept'
           ELSE 'Another'
           END AS "분류"
FROM EMPLOYEES
ORDER BY "분류";

select JOB_ID,
       case
           when JOB_ID = 16 then 'Sales Dept'
           when JOB_ID = 12 then 'Sales Dept'
           else 'Another'
       end "분류"
from EMPLOYEES
order by 2;
```

```sql
SELECT EMPLOYEE_ID as 사원번호,
       LAST_NAME as 사원명,
       CASE
           WHEN SALARY < 10000 THEN '초급'
           WHEN SALARY < 20000 THEN '중급'
           ELSE '고급'
           END AS "구분"
FROM EMPLOYEES
ORDER BY 3,2;

select rank(3000) within group (order by salary desc) "rank"
from employees;
--rank within group 과 rank over의 차이는 해당 rank의 순위를 찾아내는
것 과 전체순위를 나열하는 차이
select EMPLOYEE_ID, SALARY, rank() over (order by SALARY desc)
"rank" from EMPLOYEES;

select EMPLOYEE_ID,
       SALARY,
       DEPARTMENT_ID,
       FIRST_VALUE(SALARY) over (partition by DEPARTMENT_ID
order by SALARY desc)
           "highsal_deptID"
from EMPLOYEES;

select EMPLOYEE_ID,
       LAST_NAME,
       SALARY,
       DEPARTMENT_ID,
       row_number() over (PARTITION BY DEPARTMENT_ID order by
SALARY DESC) rnum
from EMPLOYEES;

--사원테이블에서 사원번호, 이름, 급여, 연봉을 출력하시오
--조건1)연봉은 $ 표시와 세자리마다 콤마를 사용하시오
--조건2)연봉 = 급여 * 12
select EMPLOYEE_ID,
       LAST_NAME,
       SALARY,
       '$'||to_char(salary*12,'FM999,999') as 연봉
from EMPLOYEES;


Partition by 와 group by
이 둘은 데이터를 “그룹화”한다는 공통점이 있지만 큰 차이점이 있다.
자세한 개념을 이해하지 못했다.
개념 정리를 하거나 알아봐야할 듯
Join
```