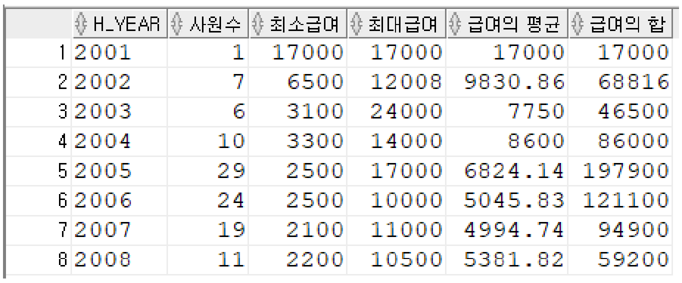
[예제]

1. EMPLOYEES 테이블을 사용하여 사원 중에서 급여(SALARY)와 커미션를 합친 금액이 가장 많은 경우와 가장 적은 경우, 평균 금액을 구하세요. 단 출력 금액은 모두 소수점 첫째 자리까지만 나오게 하세요.

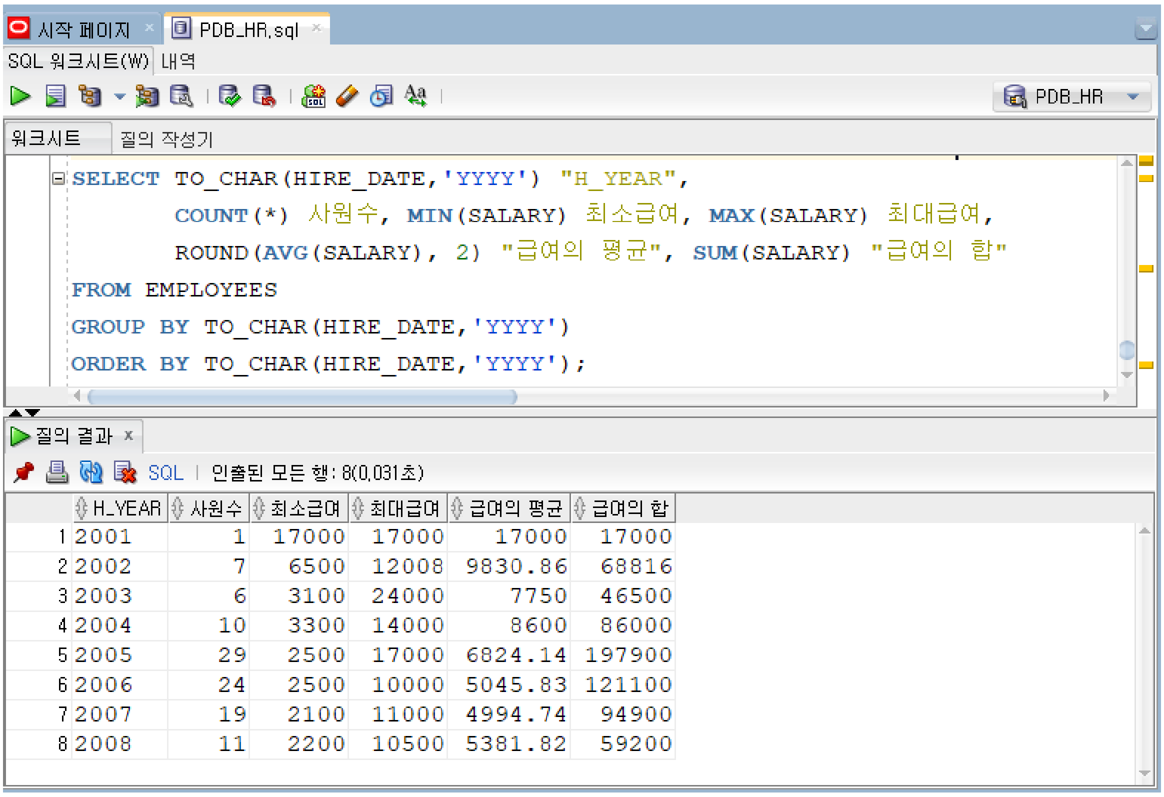
```
SELECT  MAX(SALARY+(SALARY*NVL(COMMISSION_PCT,0)))   MAX,
        MIN(SALARY+(SALARY*NVL(COMMISSION_PCT,0)))   MIN,
        ROUND(AVG(SALARY+(SALARY*NVL(COMMISSION_PCT,0))),1)   AVG
FROM  EMPLOYEES;
```

2. EMPLOYEES 테이블에서 아래의 결과를 출력하는 SELECT 문장을 작성하여라.



	H_YEAR	사원수	최소급여	최대급여	급여의 평균	급여의 합
1	2001	1	17000	17000	17000	17000
2	2002	7	6500	12008	9830.86	68816
3	2003	6	3100	24000	7750	46500
4	2004	10	3300	14000	8600	86000
5	2005	29	2500	17000	6824.14	197900
6	2006	24	2500	10000	5045.83	121100
7	2007	19	2100	11000	4994.74	94900
8	2008	11	2200	10500	5381.82	59200

```
SELECT  TO_CHAR(HIRE_DATE,'YYYY')  "H_YEAR",
        COUNT(*)  사원수, MIN(SALARY)  최소급여, MAX(SALARY)  최대급여,
        ROUND(AVG(SALARY), 2) "급여의 평균", SUM(SALARY) "급여의 합"
FROM  EMPLOYEES
GROUP  BY  TO_CHAR(HIRE_DATE,'YYYY')
ORDER  BY  TO_CHAR(HIRE_DATE,'YYYY');
```

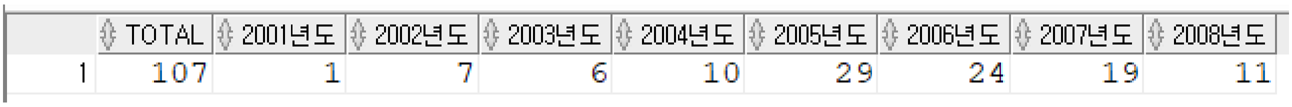


```
SELECT TO_CHAR(HIRE_DATE,'YYYY') "H_YEAR",
       COUNT(*) 사원수, MIN(SALARY) 최소급여, MAX(SALARY) 최대급여,
       ROUND(AVG(SALARY), 2) "급여의 평균", SUM(SALARY) "급여의 합"
FROM EMPLOYEES
GROUP BY TO_CHAR(HIRE_DATE,'YYYY')
ORDER BY TO_CHAR(HIRE_DATE,'YYYY');
```

인출된 모든 행: 8(0.031초)

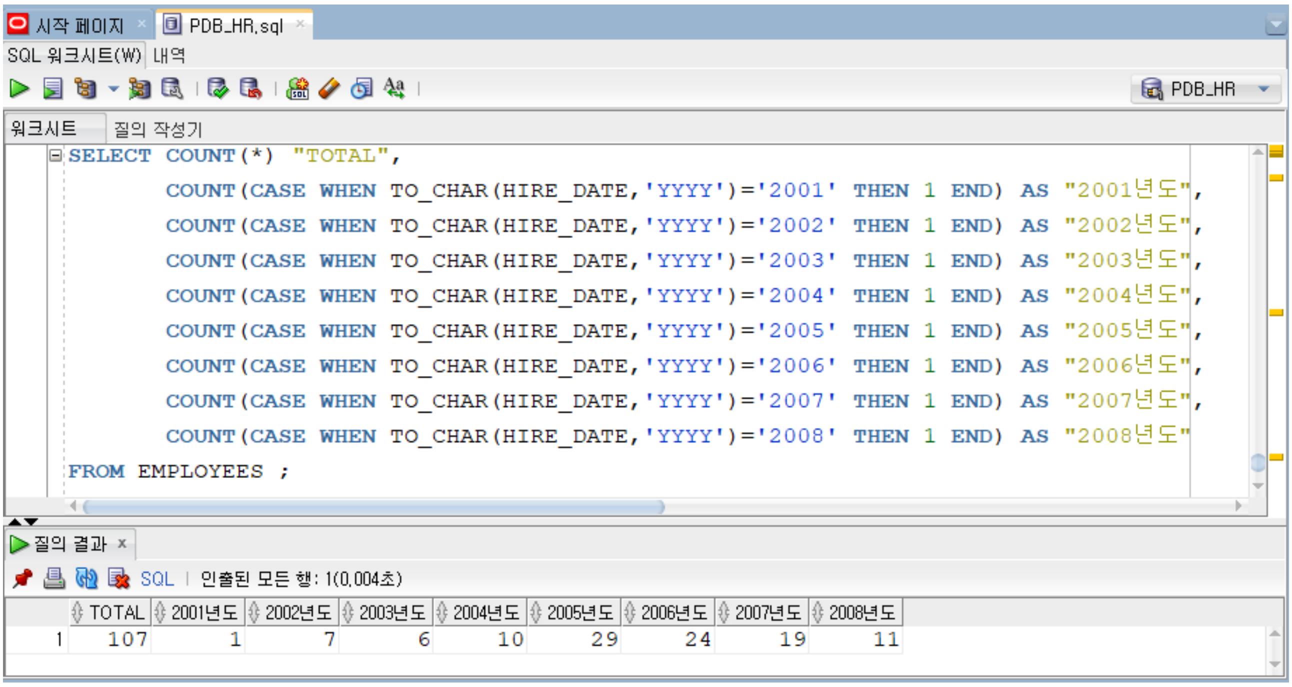
	H_YEAR	사원수	최소급여	최대급여	급여의 평균	급여의 합
1	2001	1	17000	17000	17000	17000
2	2002	7	6500	12008	9830.86	68816
3	2003	6	3100	24000	7750	46500
4	2004	10	3300	14000	8600	86000
5	2005	29	2500	17000	6824.14	197900
6	2006	24	2500	10000	5045.83	121100
7	2007	19	2100	11000	4994.74	94900
8	2008	11	2200	10500	5381.82	59200

3. EMPLOYEES 테이블에서 아래의 결과를 출력하는 SELECT 문장을 작성하여라.



	TOTAL	2001년도	2002년도	2003년도	2004년도	2005년도	2006년도	2007년도	2008년도
1	107	1	7	6	10	29	24	19	11

```
SELECT COUNT(*) "TOTAL",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2001' THEN 1 END) AS "2001년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2002' THEN 1 END) AS "2002년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2003' THEN 1 END) AS "2003년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2004' THEN 1 END) AS "2004년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2005' THEN 1 END) AS "2005년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2006' THEN 1 END) AS "2006년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2007' THEN 1 END) AS "2007년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2008' THEN 1 END) AS "2008년도"
FROM EMPLOYEES ;
```

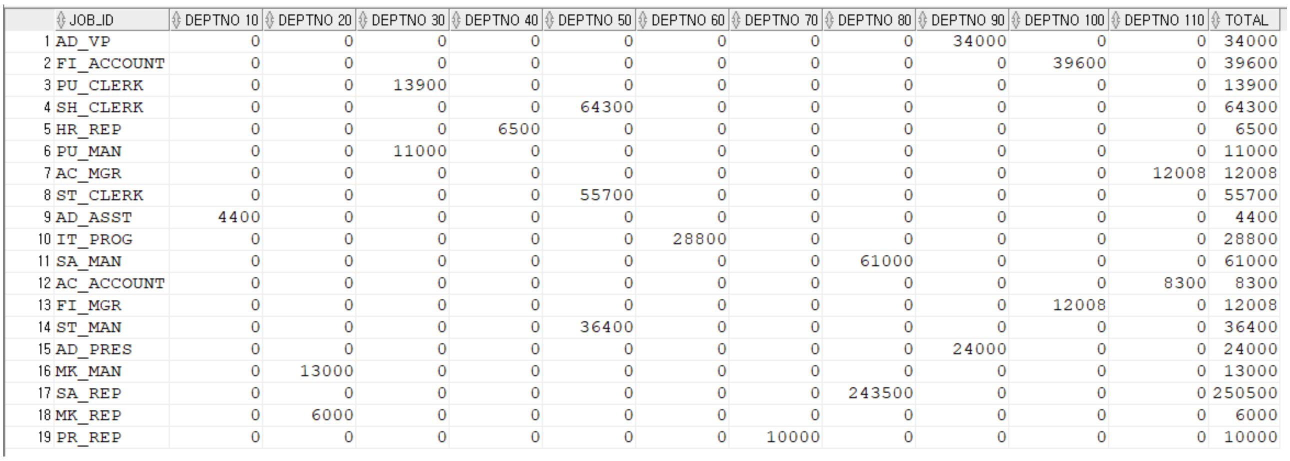


```
SELECT COUNT(*) "TOTAL",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2001' THEN 1 END) AS "2001년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2002' THEN 1 END) AS "2002년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2003' THEN 1 END) AS "2003년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2004' THEN 1 END) AS "2004년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2005' THEN 1 END) AS "2005년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2006' THEN 1 END) AS "2006년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2007' THEN 1 END) AS "2007년도",
        COUNT(CASE WHEN TO_CHAR(HIRE_DATE,'YYYY')='2008' THEN 1 END) AS "2008년도"
FROM EMPLOYEES ;
```

인출된 모든 행: 1(0.004초)

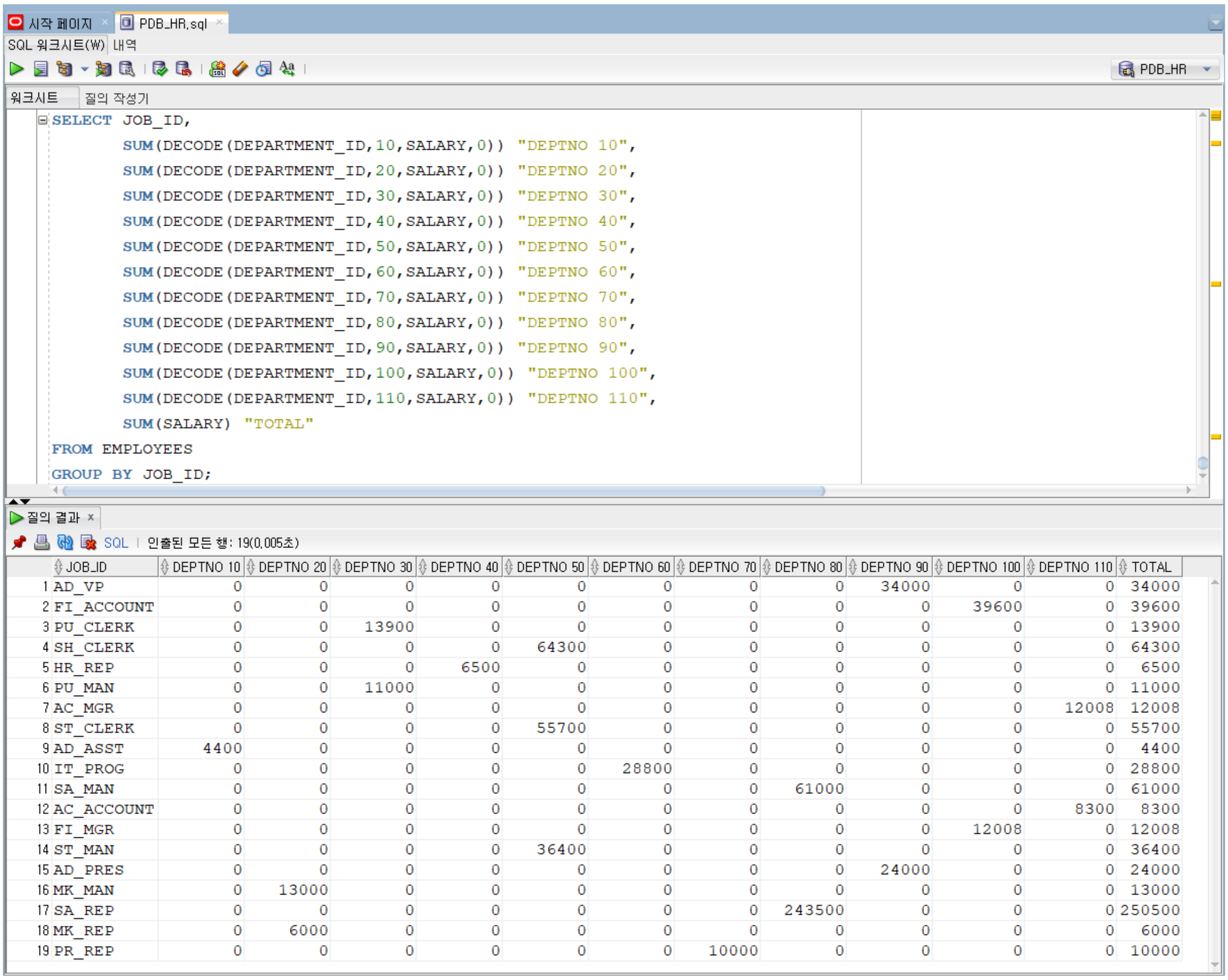
	TOTAL	2001년도	2002년도	2003년도	2004년도	2005년도	2006년도	2007년도	2008년도
1	107	1	7	6	10	29	24	19	11

4. EMPLOYEES 테이블에서 아래의 결과를 출력하는 SELECT 문장을 작성하여라.



	JOB_ID	DEPTNO 10	DEPTNO 20	DEPTNO 30	DEPTNO 40	DEPTNO 50	DEPTNO 60	DEPTNO 70	DEPTNO 80	DEPTNO 90	DEPTNO 100	DEPTNO 110	TOTAL
1	AD_VP	0	0	0	0	0	0	0	0	34000	0	0	34000
2	FI_ACCOUNT	0	0	0	0	0	0	0	0	0	39600	0	39600
3	PU_CLERK	0	0	13900	0	0	0	0	0	0	0	0	13900
4	SH_CLERK	0	0	0	0	64300	0	0	0	0	0	0	64300
5	HR_REP	0	0	0	6500	0	0	0	0	0	0	0	6500
6	PU_MAN	0	0	11000	0	0	0	0	0	0	0	0	11000
7	AC_MGR	0	0	0	0	0	0	0	0	0	0	12008	12008
8	ST_CLERK	0	0	0	0	55700	0	0	0	0	0	0	55700
9	AD_ASST	4400	0	0	0	0	0	0	0	0	0	0	4400
10	IT_PROG	0	0	0	0	0	28800	0	0	0	0	0	28800
11	SA_MAN	0	0	0	0	0	0	0	61000	0	0	0	61000
12	AC_ACCOUNT	0	0	0	0	0	0	0	0	0	0	8300	8300
13	FI_MGR	0	0	0	0	0	0	0	0	0	12008	0	12008
14	ST_MAN	0	0	0	0	36400	0	0	0	0	0	0	36400
15	AD_PRES	0	0	0	0	0	0	0	0	24000	0	0	24000
16	MK_MAN	0	13000	0	0	0	0	0	0	0	0	0	13000
17	SA_REP	0	0	0	0	0	0	0	243500	0	0	0	250500
18	MK_REP	0	6000	0	0	0	0	0	0	0	0	0	6000
19	PR_REP	0	0	0	0	0	0	10000	0	0	0	0	10000

```
SELECT  JOB_ID,
        SUM(DECODE(DEPARTMENT_ID,10,SALARY,0))   "DEPTNO  10",
        SUM(DECODE(DEPARTMENT_ID,20,SALARY,0))   "DEPTNO  20",
        SUM(DECODE(DEPARTMENT_ID,30,SALARY,0))   "DEPTNO  30",
        SUM(DECODE(DEPARTMENT_ID,40,SALARY,0))   "DEPTNO  40",
        SUM(DECODE(DEPARTMENT_ID,50,SALARY,0))   "DEPTNO  50",
        SUM(DECODE(DEPARTMENT_ID,60,SALARY,0))   "DEPTNO  60",
        SUM(DECODE(DEPARTMENT_ID,70,SALARY,0))   "DEPTNO  70",
        SUM(DECODE(DEPARTMENT_ID,80,SALARY,0))   "DEPTNO  80",
        SUM(DECODE(DEPARTMENT_ID,90,SALARY,0))   "DEPTNO  90",
        SUM(DECODE(DEPARTMENT_ID,100,SALARY,0))   "DEPTNO  100",
        SUM(DECODE(DEPARTMENT_ID,110,SALARY,0))   "DEPTNO  110",
        SUM(SALARY)  "TOTAL"
FROM EMPLOYEES
GROUP  BY JOB_ID;
```



```sql
SELECT JOB_ID,
        SUM(DECODE(DEPARTMENT_ID,10,SALARY,0)) "DEPTNO 10",
        SUM(DECODE(DEPARTMENT_ID,20,SALARY,0)) "DEPTNO 20",
        SUM(DECODE(DEPARTMENT_ID,30,SALARY,0)) "DEPTNO 30",
        SUM(DECODE(DEPARTMENT_ID,40,SALARY,0)) "DEPTNO 40",
        SUM(DECODE(DEPARTMENT_ID,50,SALARY,0)) "DEPTNO 50",
        SUM(DECODE(DEPARTMENT_ID,60,SALARY,0)) "DEPTNO 60",
        SUM(DECODE(DEPARTMENT_ID,70,SALARY,0)) "DEPTNO 70",
        SUM(DECODE(DEPARTMENT_ID,80,SALARY,0)) "DEPTNO 80",
        SUM(DECODE(DEPARTMENT_ID,90,SALARY,0)) "DEPTNO 90",
        SUM(DECODE(DEPARTMENT_ID,100,SALARY,0)) "DEPTNO 100",
        SUM(DECODE(DEPARTMENT_ID,110,SALARY,0)) "DEPTNO 110",
        SUM(SALARY) "TOTAL"
FROM EMPLOYEES
GROUP BY JOB_ID;
```

인출된 모든 행: 19(0,005초)

	JOB_ID	DEPTNO 10	DEPTNO 20	DEPTNO 30	DEPTNO 40	DEPTNO 50	DEPTNO 60	DEPTNO 70	DEPTNO 80	DEPTNO 90	DEPTNO 100	DEPTNO 110	TOTAL
1	AD_VP	0	0	0	0	0	0	0	0	34000	0	0	34000
2	FI_ACCOUNT	0	0	0	0	0	0	0	0	0	39600	0	39600
3	PU_CLERK	0	0	13900	0	0	0	0	0	0	0	0	13900
4	SH_CLERK	0	0	0	0	64300	0	0	0	0	0	0	64300
5	HR_REP	0	0	0	6500	0	0	0	0	0	0	0	6500
6	PU_MAN	0	0	11000	0	0	0	0	0	0	0	0	11000
7	AC_MGR	0	0	0	0	0	0	0	0	0	0	12008	12008
8	ST_CLERK	0	0	0	0	55700	0	0	0	0	0	0	55700
9	AD_ASST	4400	0	0	0	0	0	0	0	0	0	0	4400
10	IT_PROG	0	0	0	0	0	28800	0	0	0	0	0	28800
11	SA_MAN	0	0	0	0	0	0	0	61000	0	0	0	61000
12	AC_ACCOUNT	0	0	0	0	0	0	0	0	0	0	8300	8300
13	FI_MGR	0	0	0	0	0	0	0	0	0	12008	0	12008
14	ST_MAN	0	0	0	0	36400	0	0	0	0	0	0	36400
15	AD_PRES	0	0	0	0	0	0	0	0	24000	0	0	24000
16	MK_MAN	0	13000	0	0	0	0	0	0	0	0	0	13000
17	SA_REP	0	0	0	0	0	0	0	243500	0	0	0	250500
18	MK_REP	0	6000	0	0	0	0	0	0	0	0	0	6000
19	PR_REP	0	0	0	0	0	0	10000	0	0	0	0	10000