

A. Add extra attribute to the Subject table - department varchar2 (4), year varchar2 (1)

```
SQL> alter table SUBJECT add DEPARTMENT VARCHAR2(3);
ALTER TABLE SUBJECT ADD YEAR NUMBER(4);
Table altered.
```

```
SQL>
```

Table altered.

```
SQL> describe subject;
```

Name	Null?	Type
SUBJECTCODE	NOT NULL	VARCHAR2(4)
SUBJECTNAME	NOT NULL	VARCHAR2(15)
FACULTYCODE	NOT NULL	VARCHAR2(4)
DEPARTMENT		VARCHAR2(3)
YEAR		NUMBER(4)

B. Insert values into the fields - department, year.

```
update subject set year= 3;
```

```
update subject set department= 'CSE';
```

```
update faculty set salary = salary + 50000 where FACULTYCODE = 'FHH';
```

```
update faculty set salary = salary + 5000 where FACULTYCODE = 'FAA';
```

SUBJ	SUBJECTNAME	FACU	DEP	YEAR
CS01	DBMS	FHH	CSE	3
IT01	SOFTWARE	FAA	CSE	3
CS02	OS	FBB	CSE	3
PH01	LIGHT	FCC	CSE	1
401	ALGEBRA	FDD	CSE	2
4U01	CHARECTER	FEE	CSE	1

C. Find the maximum salary among the faculties.

```
SQL> SELECT MAX(SALARY) FROM FACULTY;
```

MAX(SALARY)
65000

D. Find the names of faculties who earn more than the average of all faculties.

```
SQL> SELECT FACULTYNAME, SALARY FROM FACULTY WHERE SALARY > (SELECT AVG(SALARY) FROM FACULTY);
```

FACULTYNAME	SALARY
ANANYA MAM	65000

E. List the names of faculties of CSE department who earn more than the average salary of the department.

```
SQL> SELECT FACULTYNAME, SALARY FROM FACULTY WHERE SALARY > (SELECT AVG(SALARY) FROM FACULTY) AND DEPTCODE='CSE';
```

FACULTYNAME	SALARY
ANANYA MAM	65000

F. Find the maximum and minimum salaries among faculties.

```
SQL> SELECT MAX(SALARY), MIN(SALARY) FROM FACULTY;
```

MAX(SALARY)	MIN(SALARY)
65000	15000

G. Find the second maximum salary among all faculties.

```
SQL> SELECT MAX(SALARY) FROM FACULTY WHERE SALARY < (SELECT MAX(SALARY) FROM FACULTY);
```

MAX(SALARY)
20000

H. Find the names of faculties who are not the HOD's of any department.

```
SQL> SELECT FACULTYNAME FROM FACULTY WHERE FACULTYNAME NOT IN (SELECT HOD FROM DEPARTMENT);
```

FACULTYNAME
ANANYA MAM
PAPRI MAM
KKS MAM
IVY MAM
PHULTULI MAM
DCD MAM

I. Find the names of subjects for students of CSE 3<sup>rd</sup> year.

```
SQL> SELECT SUBJECTNAME FROM SUBJECT WHERE YEAR =3;
```

SUBJECTNAME
DBMS
SOFTWARE
OS