a. Name the departments having highest number of faculties and display the names of faculties

```
SQL> select deptcode from facultycount where total= (select max(total) from facultycount);

DEPT
----
CSE

SQL> select facultyname from faculty where deptcode = (select deptcode from facultycount where total= (select max(total) from facultycount));

FACULTYNAME
---------------
ANANYA MAM
PHULTULI MAM
AK

SQL>
```

```
SQL> SELECT FACULTYNAME,DEPTCODE FROM FACULTY WHERE DEPTCODE = (SELECT DEPTCODE
FROM FACULTY GROUP BY DEPTCODE HAVING COUNT(*) = ALL(SELECT MAX(COUNT(*)) FROM F
ACULTY GROUP BY DEPTCODE));

FACULTYNAME       DEPT
----------------- ----
ANANYA MAM        CSE
PHULTULI MAM      CSE
```

b. Create a view on the STUDENT table named V_STD selecting all the columns. Run the following queries on the view.
i. Display all data from the view.
ii. Insert a new row into the view with the following data –
iii. Display data from student table to verify that the row has been inserted into the Table.
iv. Update the address of Bishakh to "SectorV" & verify the change in the table.

```
SQL> INSERT INTO V_STD VALUES(012363,123011,'Bishakh','Salt Lake',23371987,2005,'IT',3,TO_DATE('12-Jun-1998','DD-MON-YYYY'),25739607,25739607);

1 row created.
```

REGNO	ROLLNO	NAME	ADDRESS	PHONENO	YEAROFADM	DEPT
	YEAR	BIRTHDAT	COLLEGE_PHONE	COLLEGEPHONENUMBER		
12363		123011 Bishakh	Salt Lake	23371987	2005	IT
	3	12-06-98	25739607	25739607		
12315		123015 KALAM	KASBA	24424987	2003	CSE
	3	19-09-81	25739607	25739607		
12424		123024 IPSHITA	KAIKHALI	25739608	2004	CSE
	2	15-08-82	25739607	25739607		

```
SQL> UPDATE V_STD SET Address='SectorV' WHERE NAME='Bishakh';

1 row updated.

SQL> SELECT * FROM V_std;

REGNO       ROLLNO NAME                ADDRESS              PHONENO   YEAROFADM DEPT
------ ------------ -------------       --------------     ---------- ----------- ----
        YEAR BIRTHDAT COLLEGE_PHONE COLLEGEPHONENUMBER
---------- -------- ------------- --------------------
12363        123011 Bishakh             SectorV              23371987       2005 IT
          3 12-06-98     25739607          25739607

12315        123015 KALAM               KASBA                24424987       2003 CSE
          3 19-09-81     25739607          25739607

12424        123024 IPSHITA             KAIKHALI             25739608       2004 CSE
          2 15-08-82     25739607          25739607
```

c. Create a view on student table snamed V_STD_2 selecting the
columns – RegNo, Name, Year, Deptcode.
Display data from the view.
Try to insert data into table through view.
Update the Deptcode of 'Kamal' to 'IT' through view.
Delete records of students of 4 th year through view

```
SQL> select * from v_std2;

REGNO  NAME                YEAR DEPT
------ ------------------- ---------- ----
352301 Dhiraj                 3 CSE
12315  Kamal                  3 CSE
12424  Ipsita                 2 CSE
12250  Anita                  4 IT
12344  Biplab                 3 IT
12357  Samik                  3 IT
12419  Srijita                2 EE
12427  Saibal                 2 ECE
12236  Santanu                4 ECE
12349  Gita                   3 MCA

10 rows selected.
```

```
SQL> INSERT INTO v_std2 VALUES(12309, 'Bakshi', 4,'CSE');
INSERT INTO v_std2 VALUES(12309, 'Bakshi', 4,'CSE')
*
ERROR at line 1:
ORA-01400: cannot insert NULL into ("A1"."STUDENT"."ROLLNO")

SQL> update v_std2 set DEPTCODE='IT' where name = 'Kamal';

1 row updated.
```

```
SQL> delete from v_std2 where year = 4;

2 rows deleted.
```

d. Create a view named V_FACULTY consisting of columns
FacultyName, DeptCode from FACULTY table and HOD from
Department table.
i. Display data from V_FACULTY
ii. Try to insert a new row into this view V_FACULTY.
iii. Try to update the DeptCode of a CSE faculty to IT.

CREATE VIEW V_FACULTY AS
SELECT S. FACULTYNAME, S.DEPTCODE, F.HOD
FROM FACULTY S, DEPARTMENT F
WHERE S.DEPTCODE = F.DEPTCODE;

```
SQL>
CREATE VIEW V_FACULTY2 AS SELECT S. FACULTYNAME, S.DEPTCODE, F.HOD FROM FACULTY
S, DEPARTMENT F WHERE S.DEPTCODE= F.DEPTCODE;SQL>

View created.

SQL> select * from v_faculty2;

FACULTYNAME      DEPT HOD
---------------- ---- ----
ANANYA MAM       CSE  AK
IVY MAM          IT   SS
PHULTULI MAM     CSE  AK
PAPRI MAM        PHYS IM
KKS MAM          MTHS KKS
DCD MAM          HUM  DC
AK               CSE  AK
IM               IT   SS

8 rows selected.

SQL> INSERT INTO v_faculty2 VALUES('Mousumi','CSE','AK');
INSERT INTO v_faculty2 VALUES('Mousumi','CSE','AK')
*
ERROR at line 1:
ORA-01776: cannot modify more than one base table through a join view


SQL> update v_faculty2 set DEPTCODE='IT' where facultyname = 'AK';

1 row updated.

SQL>
```