

## CSC742 HW5

### Solution

22.13

(a)

**GRANT SELECT ON EMPLOYEE, DEPARTMENT, DEPT\_LOCATION, WORKS\_ON, PROJECT TO A WITH GRANT OPTION**

**GRANT INSERT, DELETE, UPDATE ON EMPLOYEE, DEPARTMENT, DEPT\_LOCATION, WORKS\_ON, PROJECT TO A WITH GRANT OPTION**

(b)

**CREATE VIEW V\_EMPLOYEE AS**

**SELECT FNAME, MINIT, LNAME, SSN, BDATE, ADDRESS, SEX, SUPERSSN, DNO  
FROM EMPLOYEE**

**CREATE VIEW V\_DEPARTMENT AS**

**SELECT DNAME, DNUMBER  
FROM DEPARTMENT**

**GRANT SELECT ON V\_EMPLOYEE, V\_DEPARTMENT TO B**

(c)

**GRANT SELECT ON WORKS\_ON TO C**

**GRANT INSERT, DELETE, UPDATE ON WORKS\_ON TO C**

**CREATE VIEW V\_EMPLOYEE1 AS**

**SELECT FNAME, MINIT, LNAME, SSN  
FROM EMPLOYEE**

**CREATE VIEW V\_PROJECT AS**

**SELECT PNAME, PNUMBER  
FROM PROJECT**

**GRANT SELECT ON V\_EMPLOYEE1, V\_PROJECT TO C**

(d)

**GRANT SELECT ON EMPLOYEE, DEPENDENT TO D**

**GRANT INSERT, DELETE, UPDATE ON DEPENDENT TO D**

(e)

**CREATE VIEW V\_EMPLOYEE2 AS**

```

SELECT *
FROM EMPLOYEE
WHERE DNO=3

```

**GRANT SELECT ON V\_EMPLOYEE2 TO E**

22.15

(a)

<b>Name</b>	<b>Salary</b>	<b>JobPerformance</b>	<b>TC</b>
Smith U	null U	null U	U

(b) DBMS will create another instance of Smith tuple, the result will be:

<b>Name</b>	<b>Salary</b>	<b>JobPerformance</b>	<b>TC</b>
Smith U	40000 C	Fair S	S
Smith U	40000 C	Excellent C	C
<i>Smith U</i>	<i>50000 U</i>	<i>null U</i>	<i>U</i>
Brown C	80000 S	Good C	S

8.18

(a)

```

CREATE VIEW V_DEPARTMENT AS
SELECT D.DNAME, E.FNAME, E.MINIT, E.LNAME, E.SALARY
FROM DEPARTMENT D, EMPLOYEE E
WHERE D.MGRSSN=E.SSN

```

b)

```

CREATE VIEW V_EMPLOYEE (E_FNAME, E_MINIT, E_LNAME, MGR_FNAME,
                        MGR_MINIT, MGR_LNAME, E_SALARY) AS
SELECT E.FNAME, E.MINIT, E.LNAME, E1.FNAME, E1.MININT, E1.LNAME,
       E.SALARY
FROM EMPLOYEE E, DEPARTMENT D, EMPLOYEE E1
WHERE E.SUPPERSSN = E1.SSN AND
       E.DNO = D.DNUMBER AND
       D.DNAME = "Research"

```

c)

```

CREATE VIEW V_PROJECT (PNAME, DNAME, ENUMBER, TOTALHOURS) AS
SELECT P.PNAME, D.DNAME, COUNT (*), SUM (W.HOURS)
FROM PROJECT P, DEPARTMENT D, WORKS_ON W
WHERE W.PNO = P.PNUMBER AND P.DNUM = D.DNUMBER
GROUP BY P.PNAME, D.DNAME

```

d)

```
CREATE VIEW V_PROJECT (PNAME, DNAME, ENUMBER, TOTALHOURS) AS  
SELECT P.PNAME, D.DNAME, COUNT (*), SUM (W.HOURS)  
FROM PROJECT P, DEPARTMENT D, WORKS_ON W  
WHERE W.PNO = P.PNUMBER AND P.DNUM = D.DNUMBER  
GROUP BY P.PNAME, D.DNAME  
HAVING COUNT (*) > 1
```

8.19(c)

<b>D</b>	<b>AVERAGE_S</b>
5	33250