

DSW TUT 10

A) COMPANY DATABASE

1)

```
SELECT FNAME, ADDRESS FROM EMPLOYEE  
Where DLOCATION = 'Research';
```

2)

```
SELECT PNUMBER, DNUMBER, LNAME, ADDRESS, BDATE FROM PROJECT,  
DEPARTMENT
```

```
WHERE PLOCATION = 'Stafford' AND DNUMBER = DNUMBER;
```

3)

```
SELECT ESSN, FNAME, MINIT, LNAME FROM EMPLOYEE, WORKS_ON,  
PROJECT  
WHERE WORKS_ON.PNO = PROJECT.PNUMBER AND WORKS_ON.PNO =  
PROJECT.PNUMBER AND DNUMBER = 5;
```

4)

```
SELECT PNUMBER FROM PROJECT, WORKS_ON, EMPLOYEE WHERE  
WORKS_ON.PNO = PROJECT.PNUMBER AND WORKS_ON.ESSN =  
EMPLOYEE.ESSN AND LNAME = 'Smith';
```

5)

```
SELECT ESSN, FNAME, MINIT, LNAME FROM EMPLOYEE, DEPENDENT WHERE  
DEPENDENT.ESSN = EMPLOYEE.ESSN AND DEPENDENT.ESSN IN (SELECT  
ESSN FROM DEPENDENT GROUP BY ESSN HAVING COUNT(*) > 1);
```

6)

```
SELECT ESSN, FNAME, MINIT, LNAME FROM EMPLOYEE WHERE ESSN NOT IN
```

(SELECT ESSN FROM DEPENDENT);

7)

SELECT ESSN, FNAME, MINIT, LNAME FROM EMPLOYEE, DEPENDENT WHERE
ESSN = SUPERSSN AND ESSN IN (SELECT ESSN FROM DEPENDENT);

B) **RELATIONAL ALGEBRA**

1)

SELECT PlayerName, Instrument FROM PLAYER;

2)

SELECT Event#, EventDate, Venue, OrchestraName, Conductor FROM EVENT,
ORCHESTRA WHERE EVENT.OrchestraCode = ORCHESTRA.OrchestraCode AND
Venue = 'Ulster Hall';

3)

SELECT PlayerName, Instrument FROM PLAYER WHERE Instrument = 'Violin' AND
Age < 10;

4)

SELECT PlayerName, Town FROM PLAYER, ORCHESTRA WHERE
PLAYER.OrchestraCode = ORCHESTRA.OrchestraCode;

5)

SELECT Venue, EventDate FROM EVENT, ORCHESTRA WHERE
EVENT.OrchestraCode = ORCHESTRA.OrchestraCode AND Conductor = 'P Mancini';

6)

```
SELECT PlayerName, OrchestraName, Venue, EventDate FROM PLAYER,  
ORCHESTRA, EVENT WHERE PLAYER.OrchestraCode =  
ORCHESTRA.OrchestraCode AND EVENT.OrchestraCode =  
ORCHESTRA.OrchestraCode AND ORCHESTRA.OrchestraName = 'Omagh Brass  
Ensemble';
```

7)

```
SELECT Conductor, PlayerName FROM PLAYER, ORCHESTRA WHERE  
PLAYER.OrchestraCode = ORCHESTRA.OrchestraCode AND Conductor =  
PlayerName;
```

8)

```
SELECT PlayerName, Conductor FROM PLAYER, ORCHESTRA WHERE  
PLAYER.OrchestraCode = ORCHESTRA.OrchestraCode;
```