Roll Number _____

CS3400 Database Systems

Quiz 3 - 11th Dec 2006

For the questions given below, write the corresponding SQL query statements. The primary keys for each of the relations are underlined.

Movie (MovieId, MovieName, ReleaseYear, Rating, Genre)
FilmPersonality (PID, Name, DOB, Gender, Country, SigningAmount)
WorkedIn (MovieID, PID, Role)
Award (AwardName, PID, MID, Category, Year)

The foreign key, primary key relationships:
WorkedIn (MovieID) references Movie (MovieId)
WorkedIn (PID) references FilmPersonality (PID)
Award (PID) references FilmPersonality (PID)
Award (MID) references Movie (MovieId)

1. Find the names of the actors who have worked in at least 50 movies.

```
Select F.Name
From FilmPersonality F
Where ( Select Count(*)
        From WorkedIn W
        Where W.PID = F.PID and Role = 'Actor' ) >= 50;
```

2. For each movie that received at least two 'Filmfare' awards, find the total number of 'Filmfare' awards won by it.

```
Select MID, count(*)
From Award
Where AwardName = 'Filmfare' and MID in ( Select MID
                                          From Award
                                          Where AwardName = 'Filmfare'
                                          Group By MID
                                          Having Count(*) >= 2)
Group By MID;
```

3. Find the names of Film Personalities who have played the role of ‘actor’ as well as ‘director’ in a movie for which he received a ‘Filmfare’ award.

```
Select FP.Name
From FilmPersonality FP, WorkedIn W, Award A
Where W.Role = ‘director’
and W.PID in ( Select W1.PID
                From WorkedIn W1
                Where W.PID = W1.PID and W.MovieId = W1.MovieId and W1.Role
                = ‘Actor’ )
and W.PID = A.PID and W.MovieId = A.MID and A.AwardName = ‘Filmfare’
and W.PID = FP.PID and FP.Gender = ‘M’;
```

4. Find the names of all the actors who received ‘Filmfare’ award for ‘Best Actor’ for 2 consecutive years.

```
Select Distinct FP.Name
From FilmPersonality FP, Award A
Where A.Category = ‘Best Actor’ and A.AwardName = ‘Filmfare’
and Exists ( Select A1. PID
             From Award A1
             Where A.PID = A1.PID and A.AwardName = A1.AwardName and
               A.Category = A1.Category and A1.Year = A.Year + 1)
and A.PID = FP.PID;
```

5. Insert a new tuple into ‘Award’ table for ‘Zee Cine’ ‘Best Film’ award for the movie with rating = 10, with PID as producer of that movie and year one more than the release year of that movie.

```
Insert into Award
Select ‘Zee Cine’, W.PID, M.MovieId, ‘Best Film’, M.ReleaseYear + 1
From WorkedIn W, Movie M
Where M.Rating =  10 and M.MovieId = W.MovieId and W.Role = ‘Producer’;
```

6. Insert a new tuple for the movie ‘Dhoom-3’ in WorkedIn table with with Role as ‘Actor’ and PID of the film personality who has won maximum ‘Filmfare’ awards from 1995 to 2006 in ‘Best Actor’ category.

```
Create view NumAwards (PID, Num)
As Select A.PID, Count(*)
From Award A
Where  A.Category = ‘Best Actor’ and (A.Year Between 1995 and 2006)
```

```
and A.AwardName = 'Filmfare'
Group By A.PID;

Insert into WorkedIn
Select M.MovieId, FP.PID, 'Actor'
From Movie M, FilmPersonality FP
Where M.MovieName = 'Dhoom-3' and
FP.PID in (Select N.PID
        From NumAwards N
        Where Num in (Select MAX(Num) from NumAwards));
```

7. Reduce the 'SigningAmount' by 20% of all the actresses who haven't received a single 'Best Actress' award in the years 2000 to 2006.

```
Update FilmPersonality F
Set F.SigningAmount = F.SigningAmount * 0.8
Where Not Exists (Select A.AwardName
                From Award A
                Where A.PID = F.PID and A.Category = 'Best Actress' and
                (A.Year Between 2000 and 2006))
and Exists (Select *
        From WorkedIn W
        Where W.PID = F.PID and W.Role = 'Actress')
and F.Gender = 'F';
```

8. Update the ratings of all the movies to 9.0 which received at least 2 'Oscar' awards and in which at least 3 film personalities, with 'SigningAmount' of 10 million or more, have worked either as 'Actor' or 'Actress'.

```
Update Movie M
Set M.Rating = 9.0
Where M.MovieId in (Select A.MID from Award
                    Where A.AwardName = 'Oscar'
                    Group By A.MID
                    Having Count(*) >= 2)
and M.MovieId in (Select W.MovieId
                From FilmPersonality F, WorkedIn W
                Where F.PID = W.PID and (W.Role = 'Actor' or W.Role =
                'Actress') and F.SigningAmount >= 10000000
                Group By W.MovieId
                Having Count(*) >= 3);
```