CS3400 Database Systems

SQL Lab Session (Group-1) - 18th Dec 2006

For the questions given below, write the corresponding SQL statements in part A. In part B, write the SQL statements after executing and modifying (if necessary) on SQL Server Management Studio. In part C, write down SQL statements after executing them on SQL Learning Suite. The primary keys for each of the relations are underlined.

Movie (varchar(10) MovieId, varchar(255) MovieName, int ReleaseYear, int Rating, varchar(255) Genre)
FilmPersonality (varchar(10) PID, varchar(255) Name, varchar(20) DOB, char Gender, varchar(255) Country, float SigningAmount)
WorkedIn (varchar(10) MovieID, varchar(10) PID, varchar(255) Role)
Award (varchar(255) AwardName, varchar(10) PID, varchar(10) MID, varchar(255) Category, int 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. Retrieve the names of movies of the year 2005 in which 'Amitabh' has acted.

   Select M.MovieName
   From Movie M, WorkedIn W, FilmPersonality F
   Where M.MovieId = W.MovieId and F.PID = W.PID and F.Name = 'Amitabh'
   and M.ReleaseYear = 2005 and W.Role = 'Actor';

2. For each film personality who has worked in at least 2 movies, find the number of movies he/she has worked in. Output film personality's Id and number of movies.

   Select F.PID, Count(*)
   From FilmPersonality F, WorkedIn W
   Where W.PID = F.PID
   Group By F.PID
   Having Count(*) >= 2;

3. Delete all those film personalities who have always produced a movie with rating less than or equal to 4.

   Delete From FilmPersonality
   Where PID in (Select W.PID From WorkedIn W
                    Where Not Exists (Select * From Movie M
                                      Where M.MovieId = W.MovieId and
                                      M.Rating > 4)
                    and W.Role = 'Producer');

4. Update 'SigningAmount' of all film personalities to 20000000 who have played the role of actor in a movie which has received at least 2 'ZeeCine Award'.

   Update FilmPersonality
   Set SigningAmount = 20000000
   Where PID in (Select W.PID From WorkedIn W
                    Where Exists (Select A.MID
                                From Award A
                                Where A.MID = W.MovieId and A.AwardName =
                                'ZeeCine Award'
                                Group By A.MID
                                Having Count(*) >= 2)
                    and W.Role = 'Actor');