

Assignment-1

CS482/502 Database Management Systems I

Spring 2020

Assignment: SQL

Assume that you are given the following relational schemas for the basketball team at NMSU.

- Player (ID: integer, Name: varchar(64), Birthday: date, Address: varchar(128), Email: varchar(32), PhoneNumber: char(10), PlayPos: varchar(16))
- Manager (ID: integer, LoginID: varchar(16), Name: varchar(64), Password: varchar(8), Birthday: date, Address: varchar(128), Email: varchar(32), PhoneNumber: char(10))
- ManagerCertificate (ManagerID: integer, CertificateId: integer, Certificate: blob) -
Foreign key: ManagerID references Manager(ID)
- Doctor (Email: varchar(32), Name: varchar(64), PhoneNumber: char(10))
- TakeExam (PlayerID: integer, DocEmail: varchar(32), TestDate: date, TestResult: varchar(256))
 - Foreign key: PlayerID references Player(ID)
 - Foreign key: DocEmail references Doctor(Email)
- Stats (PlayerID: integer, Year: char(4), TotalPoints: integer, ASPG: integer) -
Foreign key: PlayerID references Player(ID)
- Training (TrainingName: varchar(256), Instruction: varchar(256), TimePeriodInHour: integer)
- AssignTraining (PlayerID: integer, ManagerID: integer, TrainingName: varchar(256))
 - Foreign key: PlayerID references Player(ID)
 - Foreign key: ManagerID references Manager(ID)
 - Foreign key: TrainingName references Training(TrainingName)
- Game (GameID: integer, Date: date, Result: varchar(16), PlayingVenue: varchar(256), OpponentTeam: varchar(32))
- Play (PlayerID: integer, GameID: integer)
 - Foreign key: PlayerID references Player(ID)
 - Foreign key: GameID references Game(GameID)

Write an SQL Query for each of the following.

- 1.) Show the names and ID's of all players whose play position is "center".
- 2.) Show the total points that player "Pistol Pete" has scored each year (assume there is only one Pistol Pete).
- 3.) Show the names and emails of every manager who has exactly 3 distinct certificates.
- 4.) Show the names of every player who has played a game at "The Pit" and won (Result = "win"), in descending order of age.
- 5.) Show emails, name of Doctors who have given exams.
- 6.) Find the games that players named "Pistol Pete" and "Lobo Louie" have played in, using set operators (UNION, INTERSECT, MINUS, etc...). Show the game's ID, game's date, venue, and result.
- 7.) Perform the same query as problem 6, without using set operators (UNION, INTERSECT, MINUS, etc...)
- 8.) Find the Names and IDs of players who have scored more points than the average player.
- 9.) Show all players that were born on the same day (I.E. If Bob and Joe were both born on 12/25/95, and Jim and Steve were both born on 7/4/94, show the names and the birthday they share).
- 10.) Find the total number of points the Aggie basketball team scored in 2019.