1.

1. Determine appropriate primary and foreign keys needed for the baseball database.

Master table

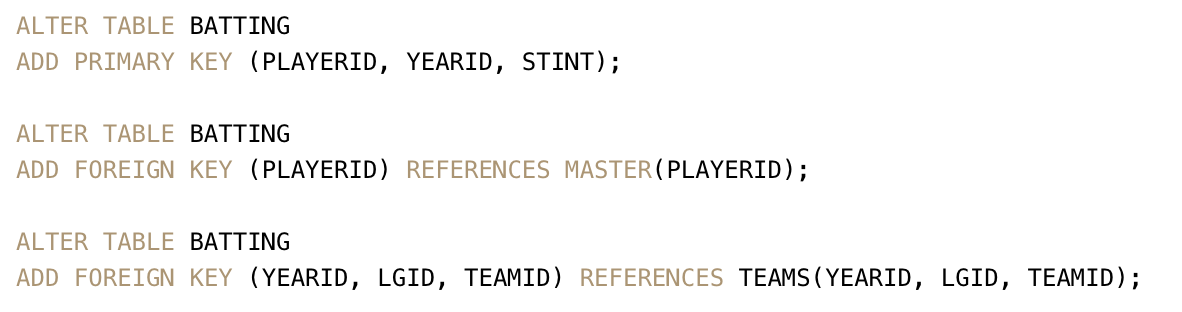
Primary key: PLAYERID



Batting table

Primary key: PLAYERID, YEARID, STINT

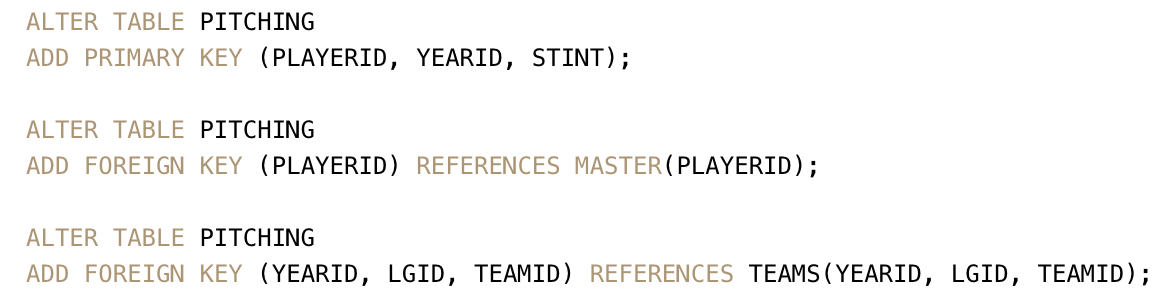
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAM)



Pitching table

Primary key: PLAYERID, YEARID, STINT

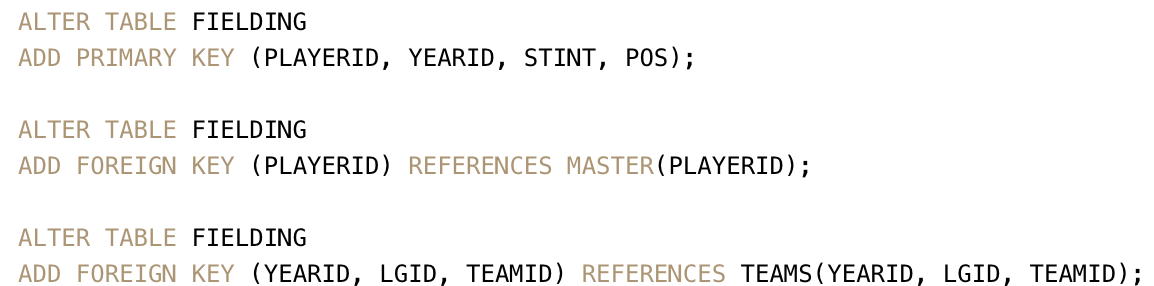
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



Fielding table

Primary key: PLAYERID, YEARID, STINT, POS

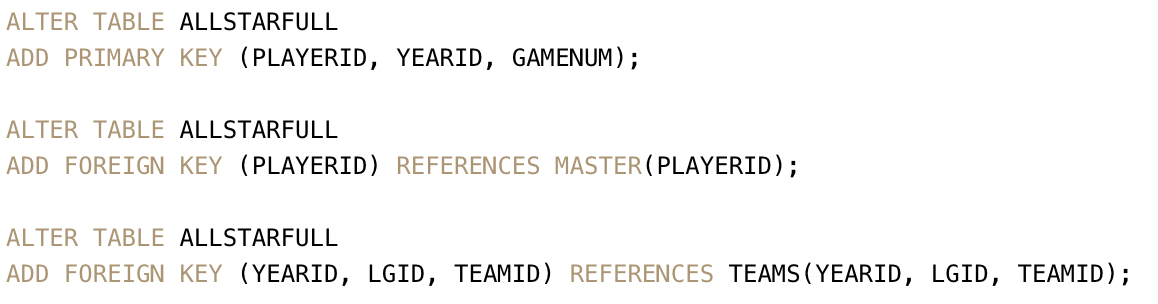
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



AllstarFull table

Primary key: PLAYERID, YEARID, GAMENUM

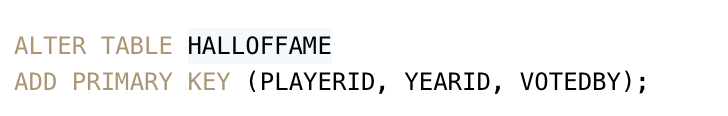
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)

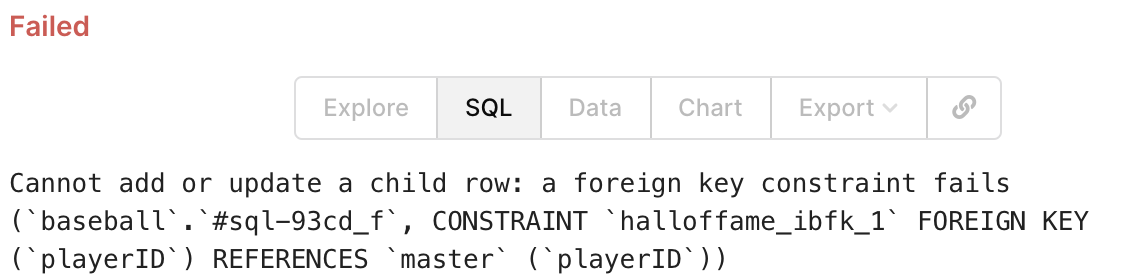


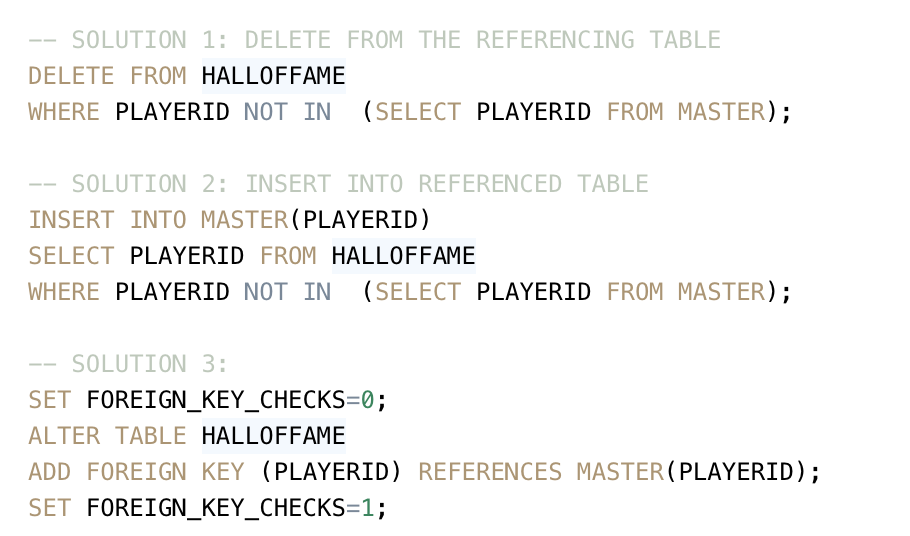
HallOfFame table

Primary key: PLAYERID, YEARID, VOTEDBY

Foreign key: PLAYERID (MASTER)





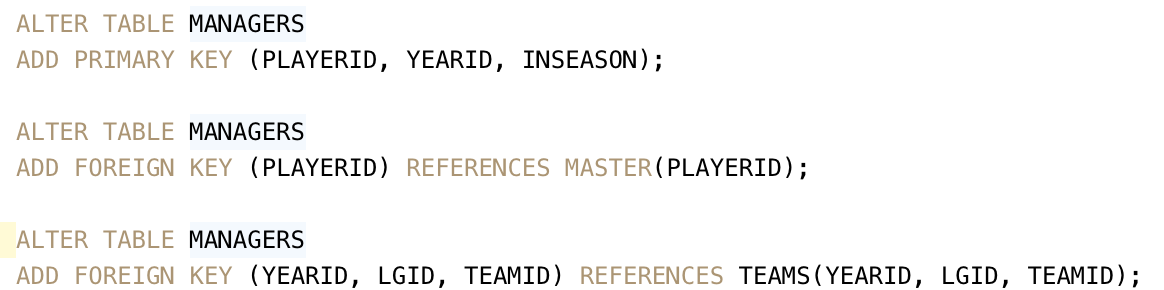




Managers table

Primary key: PLAYERID, YEARID, INSEASON

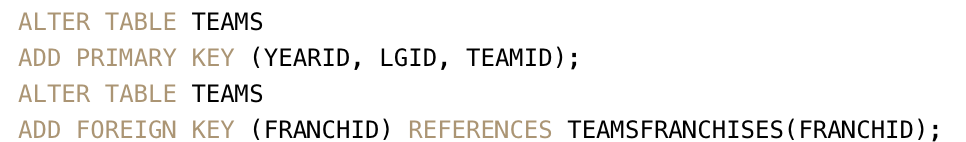
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



Teams table

Primary key: YEARID, LGID, TEAMID

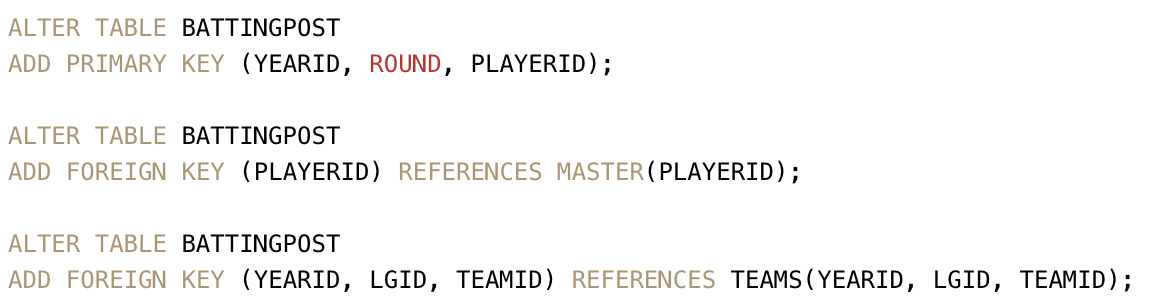
Foreign key: FRANCHID(TEAMFRANCHISES)



BattingPost table

Primary key: YEARID, ROUND, PLAYERID

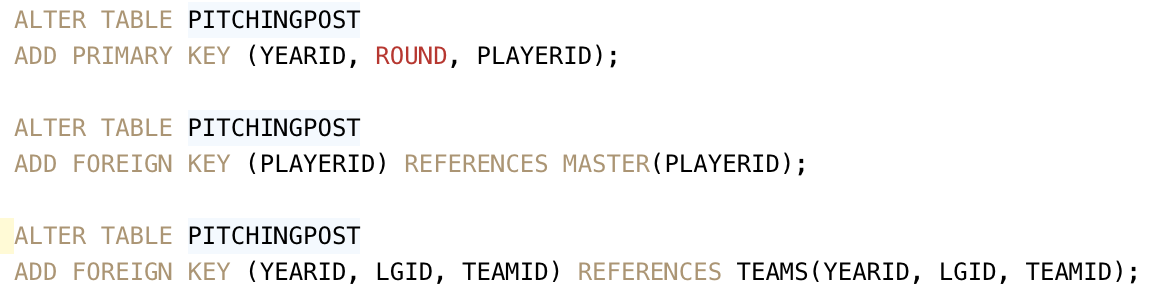
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



PitchingPost table

Primary key: YEARID, ROUND, PLAYERID

Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



TeamFranchises table

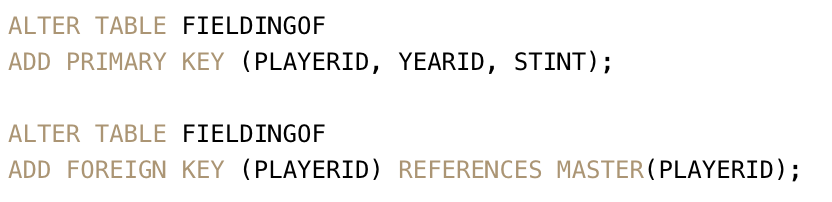
Primary key: FRANCHID



FieldingOf table

Primary key: PLAYERID, YEARID, STINT

Foreign key: PLAYERID (MASTER)



ManagersHalf table

Primary key: PLAYERID, HALF

Foreign key: PLAYERID, YEARID, INSEASON (MANAGERS)



TeamsHalf table

Primary key: TEAMID, HALF

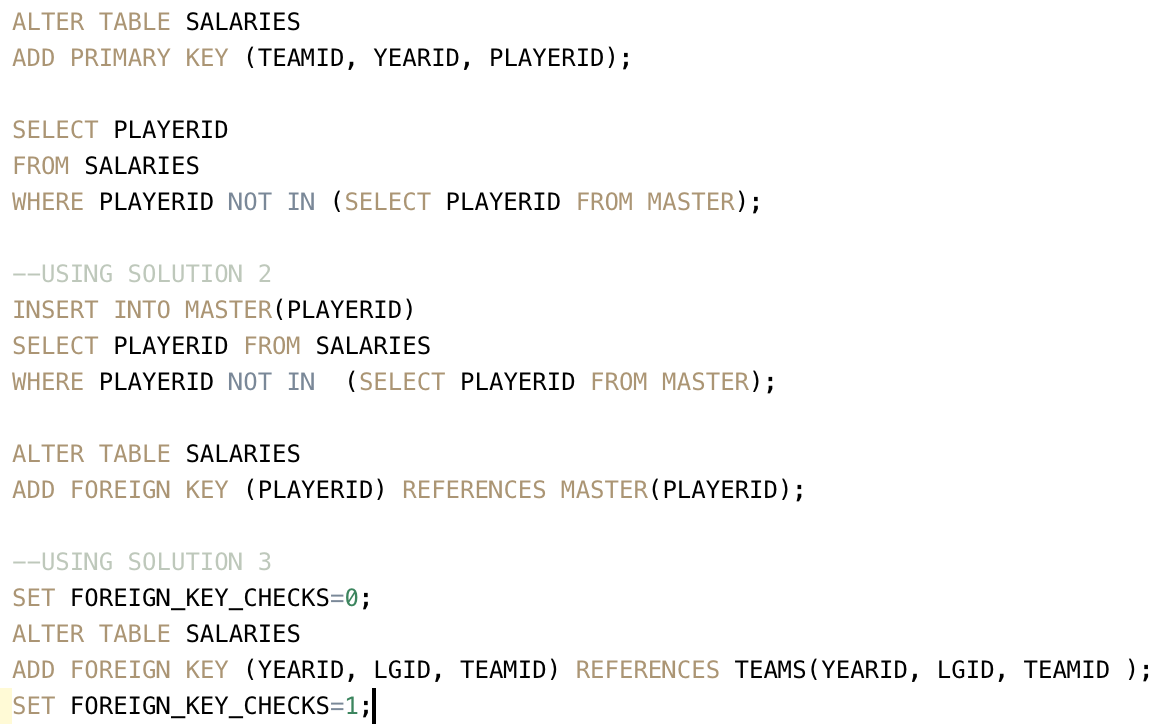
Foreign key: YEARID, LGID, TEAMID (TEAM)



Salaries table

Primary key: TEAMID, YEARID, PLAYERID

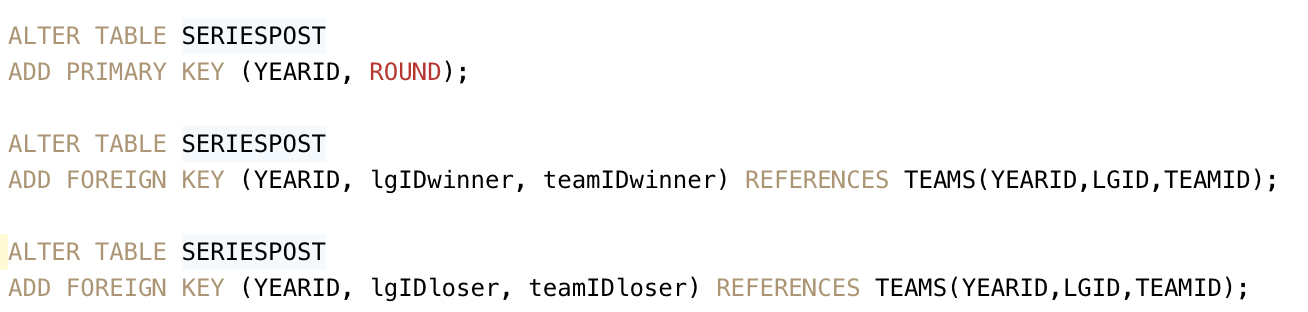
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



SERIESPOST table

Primary key: YEARID, ROUND

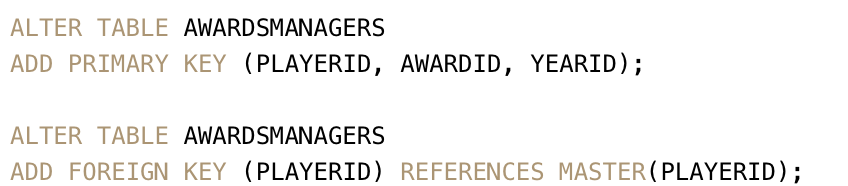
Foreign key: YEARID, teamIDwinner, lgIDwinner (TEAMS), YEARID, teamIDloser, lgIDloser (TEAMS)



AwardsManagers table

Primary key: PLAYERID, AWARDID, YEARID

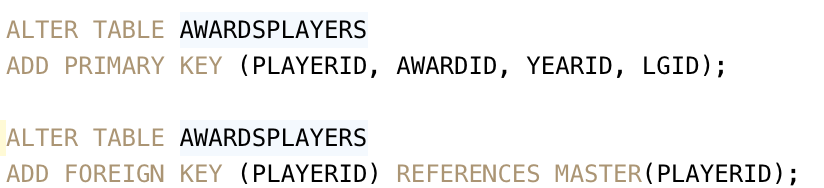
Foreign key: PLAYERID (MASTER)



AwardsPlayer table

Primary key: PLAYERID, AWARDID, YEARID, LGID

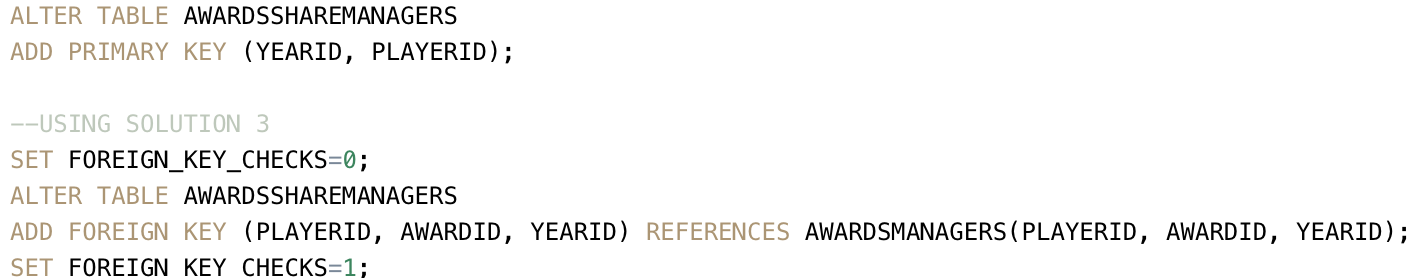
Foreign key: PLAYERID (MASTER)



AwardsShareManagers table

Primary key: YEARID, PLAYERID

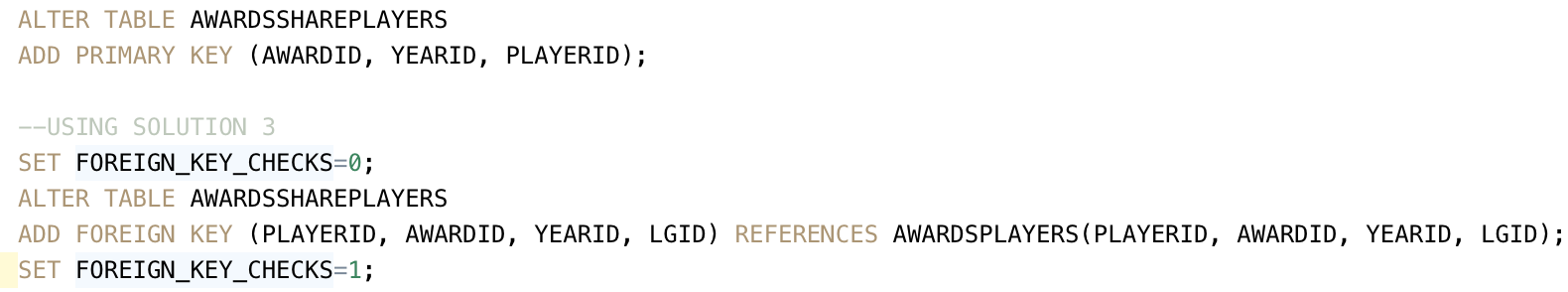
Foreign key: PLAYERID, AWARDID, YEARID (AWARDSMANAGER)



AwardsSharePlayers table

Primary key: AWARDID, YEARID, PLAYERID

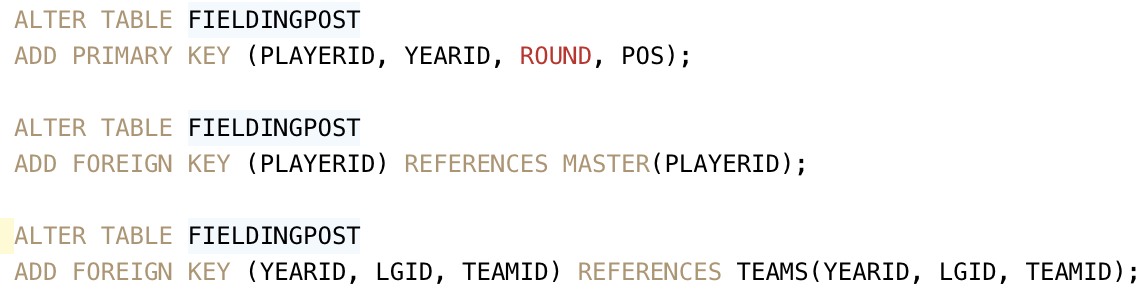
Foreign key: PLAYERID, AWARDID, YEARID, LGID (AWARDSPLAYER)



FieldingPost table

Primary key: PLAYERID, YEARID, ROUND, POS

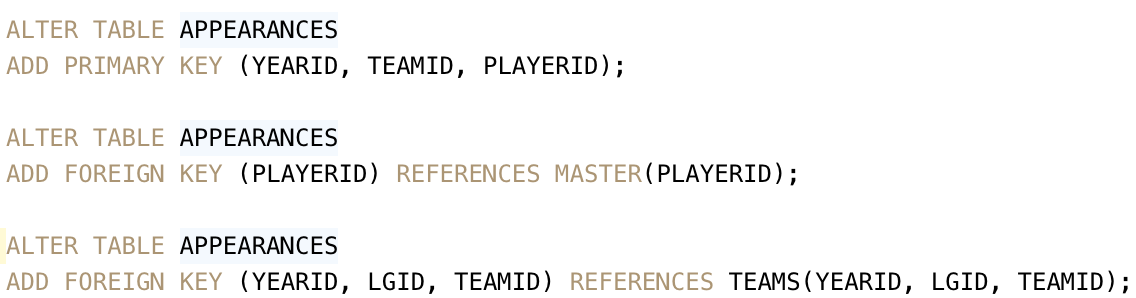
Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



Appearances table

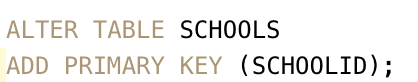
Primary key: YEARID, TEAMID, PLAYERID

Foreign key: PLAYERID (MASTER), YEARID, LGID, TEAMID (TEAMS)



Schools table

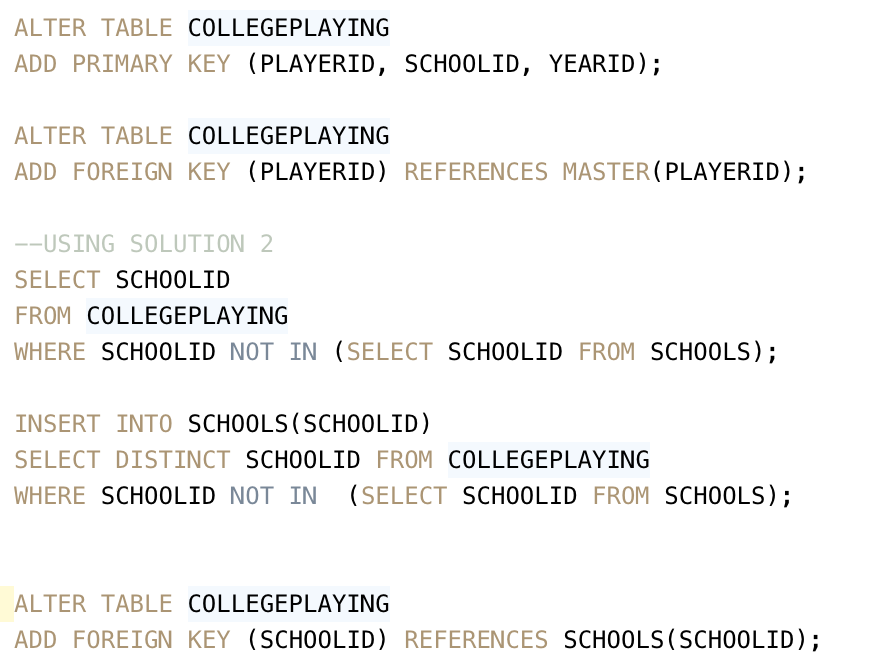
Primary key: SCHOOLID



CollegePlaying table

Primary key: PLAYERID, SCHOOLID, YEARID

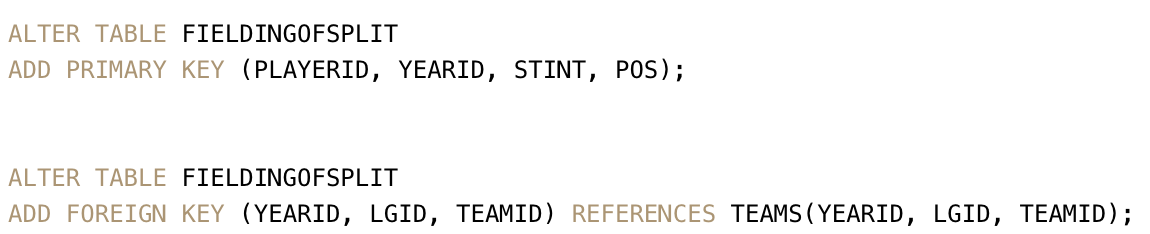
Foreign key: PLAYERID (MASTER), SCHOOLID(SCHOOLS)



FieldingOFsplit table

Primary key: PLAYERID, YEARID, STINT, POS

Foreign key: YEARID, LGID, TEAMID (TEAMS)



Parks table

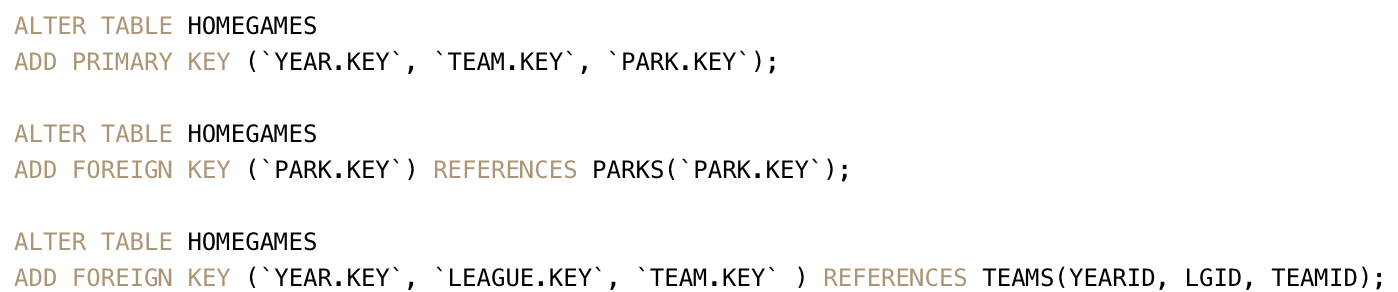
Primary key: PARK.KEY



HomeGames table

Primary key: `YEAR.KEY`, `TEAM.KEY`, `PARK.KEY`

Foreign key: PARK.KEY(PARKS), `YEAR.KEY`, `LEAGUE.KEY`, `TEAM.KEY`(TEAMS)



2.

Where is the csv data located relative to CLI and DB server?

mysql> show global variables like "%datadir%";

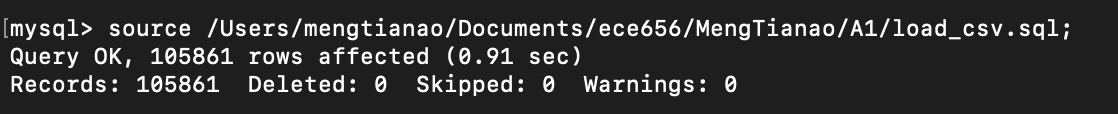
datadir | /usr/local/mysql/data/

/usr/local/bin/bash

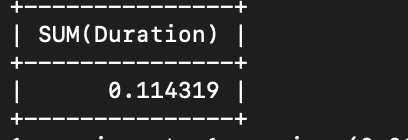
we can see that CLI and DB server locate on the same computer for this question, and the csv data locate on the DB server, in the DB server data forder.



1. Load statement



1. Insert statement



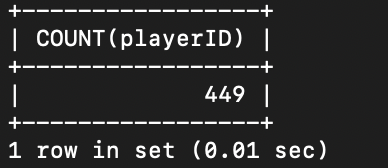
How to calculate the total runtime of multiple queries:

1. SET profiling = 1;
2. Execute the multiple queries;
3. SELECT SUM(Duration) from information\_schema.profiling;

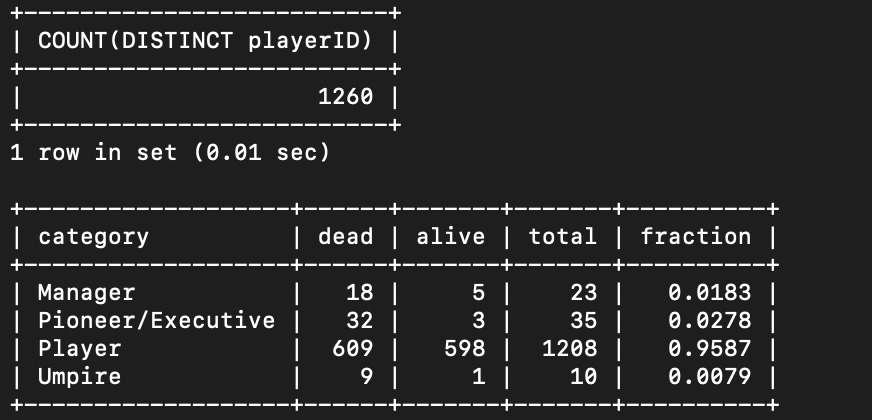
3.

RA is shown in ECE656\_A1.pdf.

1)



2)

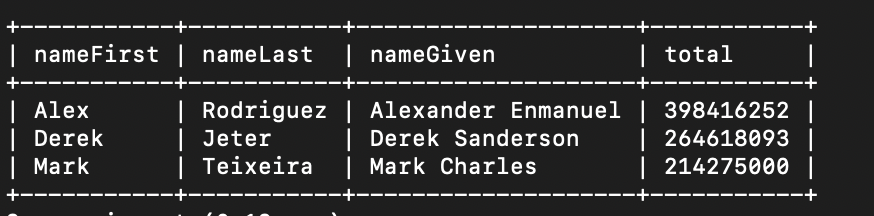


3)

Toal



Player\_only



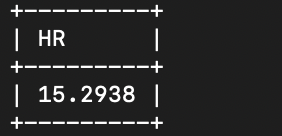
Manager only



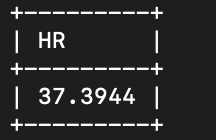
Other



4)



5)



6)

