

Assignment1_Relational Database SQL

——Goal:

Create relations to store data

- normalize relations
- employ foreign key constraints on necessary columns

Load data into relations

Perform queries to answer questions

——Deliverables:

- describe the schemas of your relations (CREATE statements)
- explain your data import strategy (python library/csv importer/shell command/etc)
- queries / answers to my questions (answer first query after)

Remember you may not need all the columns so you may choose to build a model that will be the minimal to answer the questions.

Automation is always the goal.

There is a deadline ;)

Questions:

1

a)how many players are inducted into the hall of fame?

b)how many distinct players in the batting data set are in the hall of fame?

2

a)what player has exactly 3000 hits total for his career?

b)what year was he inducted into the hall of fame?

3

what player had the highest number of homeruns in 1919?

4

what team has had the most hits after the year 2000, how many?

5

- a) what player has the most cumulative hits?
- b) how many does he have?
- c) is he in the hall of fame?
- d) how many votes has he received total?

6

- a) what 3 players have the highest number of cumulative strikeouts over their career that have been inducted into the hall of fame?
- b) how many total strikeouts do they each have?

7

- a) what 3 players have the highest cumulative total number of homeruns and have been inducted into the hall of fame?
- b) what 3 players have the highest cumulative total number of homeruns and have NOT been inducted into the hall of fame?

8

what player had the highest batting average from 1930 to 1940 (inclusively) with a cumulative total of hits over 1800 and has NOT been elected into the hall of fame?
batting average = hits/atbats

9

what player averaged the highest number of walks from 1900-1920 (inclusively) with over 500 atbats?

10

write a query that uses a non equi join and explain what you are doing.

11

write a query that uses an outer join and explain what you are doing.