**GROUPING PROJECT**

**25 Points**

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Read instructions carefully. Failure to do so will likely cost you points.

Create SELECT statements to produce the described data. All columns must have meaningful column headers. Turn in all SQL statement(s) needed to solve the problem – not the data itself. Paste your answers below the problem in red and turn in only this answer page. I HIGHLY recommend you make sure you have answered all aspects of a problem before submission. I also suggest you create views to simplify your work. Do this assignment from your college DB. I if you use views I will look them over. I also will expect you to be able to decide which tables to join/use (know your data). If you have not already, copy the data into your database. You cannot create views outside your database. Use the BaseBall2013 data. Also, make sure you run your statements before you turn them in. If you need assistance, see me. (3 points each)

1. Total lifetime batting history (all batting table data) for all players returned in player name order (hint: simple SELECT from view).

select \* from vwBattingHistory

1. Hall of fame homerun hitters that hit 500 or more homeruns in their life. Include their name and number of home runs. Because there might be duplicate names, I suggest you group by *playerID* and name.

select playerIDpk, nameGiven as 'Full Name', sum(HR) as 'Home Runs'

from vwBattingHOF

group by playerIDpk, nameGiven

having sum(HR) >= 500

order by playerIDpk

1. As long as we are at it (previous question), how many and which players have the same first and last names?

select nameFirst+' '+ nameLast as 'Full Name', count(\*) as 'Players with name'

from Players

group by nameFirst, nameLast

having count(\*)>= 2

You will need only the Players table. Exclude unique names – include only those with 2 or more matches (*Having*)

1. The average player weight and height by teams during the year 1987.

Team Avg Weight in 1987

select teamID, avg(weight) as 'Avg Weight in 1987', avg(height) as 'Avg Height in 1987'

from vwTeamPhysicalStats

group by teamID, yearID

having yearID = 1987

order by teamID

1. What are the top 5 Teams with the greatest average weight (display the team and weight). TOP is acceptable here.

select Top 5 teamID, avg(weight) as 'Avg Weight'

from vwTeamPhysicalStats

group by TeamID

order by avg(weight) desc

1. Compare the average weight and height of the Mariners (SEA) for each year they played. Include the year, average weight and average height in year order.

select yearID, avg(weight) as 'Avg Weight', avg(height) as 'Avg Height'

from vwTeamPhysicalStats

group by yearID, teamID

having TeamID = 'SEA'

order by YearID

1. Compare the total homeruns hit by year for all teams in team then year order

Year Total Homeruns

select teamID, yearID, sum(HR) as 'Total Homeruns'

from Batting

group by teamID, yearID

order by teamID, yearID

1. Which (if any) current batters (no finale) that weigh less than 180 pounds, hit more than 20 home runs in any given year. Return the name and number of home runs ordered by the most homeruns to the least.

select nameGiven, weight, yearID, HR

from vwLittleSluggers

where finalGameDate is null

group by nameGiven, weight, yearID, HR

having weight < 180 and HR > 20

order by HR desc