For the questions below, you MUST replace NJITID with your NJIT ID. For example, the view name in question 1 should look something like jm123_Player_History

1. Using the People, CollegePlaying, Batting and other tables indicated below, create a view named NJITID_Player_History that contains:

playerID

Player Full Name,

Total 401K amount from the People table

of yrs played from the Batting table

of Teams played for the Batting table

Career Total Home Runs from Batting

Career Batting Average (calculate the Batting Average using all the data for the player)

Total Salary

Average Salary

Starting Salary from the Salaries table

Ending Salary from the Salaries table

Overall percentage of salary increase (percent difference in starting and ending salary)

Year Last played in College from the CollegePlaying Table

Number of Schools attended from the CollegePlaying Table. The value should be 0 if the player didn't attend college

Last Year Played from Batting

Career Total of Wins from Pitching Table

Career Total of Strike Outs (SO) from the Pitching Table

Career Power Fitness Ratio (statistical measure of the performance of a <u>pitcher</u>. It is the sum of <u>strikeouts</u> (SO) and <u>walks</u> (BB) divided by sum of <u>innings</u> pitched (IPouts/3) from the Pitching Table

Total games played (G) from the Fielding Table

Total games started (GS) from the Fielding Table

Percent of Total Games Played (you need to calculate this value by dividing the Total Games Played by the number of games in their career. The number of games in their career can be calculated using the summing G column in the Teams Table for the years the player played)

Total Number of Awards as a player from AwardsPlayer and AwardsSharePlayer

Total number of Awards as a manager from AwardsManager and AwardsShareManager

Year Inducted in the Hall of Fame

of times nominated for the hall of fame but not inducted (# of rows where inducted = 'N')

Hall of Fame (Yes or No) as an indicator if the player was actually elected to the Hall of Fame

Note on Dates: For dates, do not use the Debut and FinalGame columns from the PEOPLE table. There are problems with the data and they will cause incorrect calculations. Instead use Min(YearID) and Max(yearid) from the appropriate table to get correct dates.

Remember to check your answers. Due to the data, if you do not associate the tables properly, you will lose results. You should end up with the same number of rows in the results as the number of rows in the PEOPLE table. You do not have to have the exact correct number of rows because of the amount of work involved to get things 100% correct, but (and no pun intended,) you should be in the ballpark!. 15 points will be taken off if your answer does not contain all the required columns.

I recommend breaking the required columns up into pieces and use WITH statements or subqueries to create each part. Use left joins to ensure data is not dropped due to all players not having information in all tables.

Your view must return 20, 370 rows, If you have less than that number, you are not coding the LEFT JOINS properly, If you have more than that number, you have a subquery that is returning more than 1 row per player. TO find the problem subquery, run the following:

```
select * from [your view name] order by playerid
select playerid, count(*) from [your view name] group by playerid having count(*) > 1 order by playerid
```

By looking at the view results for the columns that have different values for the same playerid will show you the subquery(s) giving multiple results.

After creating your view write the following queries using your view. Make sure you have a GO statement in between the SQL for creating the view and the following 2 select statements:

- 1. Select all the columns in your view
- 2. Write a query that calculates the average of the [# of yrs played], [Average Salary] and [Career Batting Average] of all players who's last name begins with the letter A using the information in the view.

Sample for query #1

playerid	fullname	Total_401K	num_years	num_teams	runs	career_ba	tot_sal	avg_sal	min_Salary	max_salary	perct_incr	Num_schools	max_col	max_appear	tot_so	tot_win	car_pfr
tot_games	tot_GS per	rc_start	tot_award_p	lay	tot_award_m	an	iyear	nomcount	inducted								
aardsda01	David(David Allan) Aardsma 837322.50	9	8	0	0.000000	9259750.00	1322821.4285	300000.00	4500000.00	0.9333333333333333	2	2003	2015	340	16	0.172436
331	0.0	00000000000	NULL		NULL		NULL	0	N								
aaronha01	Hank(Henry Louis) Aaron NULL	23	3	755	0.304998	NULL	NULL	NULL	NULL	NULL	NULL	NULL	1976	NULL	NULL	NULL
3020	2977 0.8	35297418630	36		NULL		1982	0	Υ								
aaronto01	Tommie(Tommie	Lee) Aaron	NULL	7	2	13	0.228813	NULL	NULL	NULL	NULL NULL	NULL	NULL	1971	NULL	NULL	NULL
387	206 0.1	41289437585	NULL	NULL	NULL	0	N										
aasedo01	Don(Donald Willia	am) Aase 253000.00	13	5	0	0.000000	2300000.00	575000.00	400000.00	675000.00	0.4074074074074074	NULL	NULL	1990	641	66	0.109975
118	01 0.0	AAA110082A7	MITIT	MITIT	MILILI	Λ	N										

Sample Answer for query #2

AvgYrsPlayed averageSal 5 \$1,332,18 careerba

\$1,332,182.83 0.1878