**Aggregate Functions  
50 Points**

The following are problems you are to solve using Aggregate functions. **DO NOT USE TOP**. If I ask an assessment question, give me an answer and the SELECT statement used to derive the answer. You will likely need to watch my recorded lecture or attend a lecture to complete come of the problems. Include column headers!

Add your answers in the space below the problem. Upon completion, drop the completed Word Doc into the drop box without zipping. (5 points)

**Using the Baseball DB *(5 points each)***

1. How many players are in Baseballs players table?  
   18,846  
   **select** **count**(\*) **from** Players

1. How many players were born in the city of Portland, OR?  
   58  
   **select** **count**(\*) **from** Players   
   **where** birthCity='portland'**and** birthState='or'

1. How many left handed players that weigh more than 200 pounds were born in Texas?  
   71 players that either bat and/or throw left handed  
   **select** **count**(\*) **from** Players  
    **where** (bats='l' **or** throws='l') **and** weight>200 **and** birthState='TX'

1. How many players that we know are deceased had a final game before 1/1/1900?  
   1,736  
   **select** **count**(\*) **from** Players

**where** (deathDate **is** **not** **null** **or** deathCountry **is** **not** **null** **or** deathState **is** **not** **null** **or** deathCity **is** **not** **null**)  
 **and** finalGameDate<1/1/1900

1. How many players were born and died in the State of Washington?  
   27  
   **select** **count**(\*) **from** Players  
    **where** birthState='WA' **and** deathState='WA'

1. Using the Salaries table, how many players ,what was the total payroll AND average salary of the Seattle Mariners (SEA) in 2010?  
   total payroll: $86,510,000; average salary: $3,089,642.86.  
   **select** **sum**(salary) **as** payroll, (**sum**(salary)/**count**(\*)) **from** Salaries  
    **where** yearID=2010 **and** teamID='SEA'

1. Using the salaries table, how many years of salary data are maintained by the Mariners? (Hint: DISTINCT).   
   31  
   **select** **count**(**distinct** yearID) **from** Salaries  
    **where** teamID='SEA'

**Using the Contributions table *(5 points each)***

1. How many donations were made from Spokane, WA?  
   1,117  
   **select** **count**(\*) **from** tblDonations  
    **where** city='Spokane' **and** state='wa'
2. What was the average donation made from the zip code where you reside?  
   $558  
   **select** **avg**(don\_amount) **from** tblDonations  
    **where** zip='99216'
3. Who city had a larger number of donations (2 statements), Los Angeles or New York?  
   New York received more dontaions at 34,997 vs LA's 11,219  
   **select** **count**(\*) **as** LAdonations **from** tblDonations  
    **where** city='los angeles'  
   **select** **count**(\*) **as** NYdonations **from** tblDonations  
    **where** city='New York'

**Using the Weather Database and Spokane table:  *(5 points each)***

1. What is the hottest and coldest temperatures recorded in Spokane?  
   Hottest: 108; Coldest: -30.  
   **select** **MAX**(RecHi) **as** Hottest, **MIN**(RecLo) **as** Coldest **from** Spokane2012
2. What is the overall average daily temperature in Spokane? (mean mean)  
   Average Daily Temperature: 48  
   **select** **AVG**(Mean) **from** Spokane2012

1. What is the average time the sun sets in Spokane?  
   6:25 PM  
   **select** DATEADD(mi, DATEDIFF(mi, **MIN**(Sunset), **MAX**(SUNSET))/2, **MIN**(Sunset)) **from** Spokane2012
2. What is the earliest and latest the sun raises in Spokane?  
   Earliest: 4:51 AM; Latest: 7:38 AM  
   **select** **MIN**(Sunrise), **MAX**(Sunrise) **from** Spokane2012
3. How many record lows were recorded in the year 1888?

7  
**select** DATEADD(mi, DATEDIFF(mi, **MIN**(Sunset), **MAX**(SUNSET))/2, **MIN**(Sunset)) **from** Spokane2012

1. What is the most recent year that a record high was recorded?

2010  
**select** **MAX**(RecHiYr) **from** Spokane2012

**More Challenging (follow my instructions in the video). You will use a single SELECT *(5 points each)***

1. What Mariner (just PlayerID) had the greatest salary in 2012?  
   hernafe02  
   **select** playerID **from** Salaries   
    **where** salary=(**select** **max**(salary)**from** Salaries   
    **where** teamID='sea'   
    **and** yearID=2012)  
    **and** teamID='sea'

1. What players without a date of death have exactly the same weight as the all-time average for baseball?  
   Assuming you mean how many: 877

**select** **count**(\*) **from** Players  
 **where** deathDate **is** **null  
 and** weight=(**select** **avg**(weight) **from** Players)

1. Who tends to weigh more, domestic born or foreign born players? (Hint: Remember what happens when you perform ***SELECT 7-6***? Replace the numbers on each side of the ‘-‘ with SELECT statements.

Foreign born players are on avergage 4 pounds heavier than domestic players.

**select** (**select** **avg**(weight) **from** Players **where** birthCountry='USA')-  
 (**select** **avg**(weight) **from** Players **where** birthCountry!='USA')

**Reread the problems to make sure you completed everything. In addition to the SELECTs, did you give me an answer to the above problems? If not you will lose 1 point per problem. Turn work in unzipped as a DOC or RTF file.**