Download the [Exam 1-1.xlsx](https://learn.vccs.edu/courses/374814/files/96129536/download?wrap=1)[Preview the document](https://learn.vccs.edu/courses/374814/files/96129536/download?wrap=1) to answer your questions for the entire exam. Then, follow the directions provided to upload the completed file.

Question 1

Use **Baseball Players** sheet to answer this question. The file Exam1.xlsx, sheet named **Baseball Players**, contains salary data on all Major League Baseball players for year 2015. Create a column chart of counts of the different positions. Use an appropriate title for your chart. Which position is most common? [Note: Your answers - graph and any comment should be placed in **Baseball Players** sheet. Do not create a new sheet or a new workbook.]

Question 2

Use **Salary** sheet to answer this question. Answers must be placed in order i.e. a, b, ...,f. Round your answers for parts (d), and (e) to 1 decimal place.

The file Exam1.xlsx, sheet named **Salary**, contains salary data on all Major League Baseball players for year 2015.

1. Indicate the level of data measurement for **Salary**. [Hint: whether nominal, ordinal, interval or ratio.]
2. Construct a histogram using 10 class intervals for the **Salary** variable.
3. What does the histogram tell us about the salary of the Major League Baseball players for 2015? Write a paragraph.
4. Calculate the values of mean, and median for **Salary**.
5. Calculate the skewness for salary (note: use Excel function **SKEW**). Is the distribution of the Salary skewed?  Negatively or positively?
6. Based on your answer for part (e), which measure, mean or median, should be used as  measure of central tendency? Why? Justify.

[3 + 12 + 3 + 5 + 3 + 4 = 30 points]

[Note: Your answers – graph, statistics, and comments should be placed in **Salary** sheet. Do not create a new sheet or a new workbook.  Insert a text box for comments. ]

View keyboard shortcuts

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Paragraph

Question 3

Use **Comparisons** sheet to answer this question.

The file **Exam 1.xlsx**, sheet named **Comparisons** contains salary data on all Major League Baseball players for years 2011 and 2015. Round your answers to 1 decimal place.

 a. Calculate the minimum and maximum salary for 2011 and 2015.

b. What are values of the range for 2011 and 2015.

c. What are the values of the population standard deviation for these data. The variability is higher for which year?

d. What are the values of 25th and 75th percentile of these data? Use PERCENTILE.EXC Excel function.

e. Construct a box-and-whisker plot for these data.

[ 5 + 5 + 5 + 5 + 10 = 30  points]

Question 4 Use **Spent** sheet to answer this question.

The file **Exam 1.xlsx**, sheet named **Spent**provides information about 1000 customers and how much the customers spent at the company last year**.**

What is average amount spent by all married females with no more than two children and salary less than $60,000? Round your answer to whole number. Put a box around your answer.