Name:_____

INSTRUCTIONS

This week our task is to create presentation quality graphs. The assignment requires that you spend time using the chart commands in Excel to learn to create and modify graphs. For each of the graphs you must produce I briefly describe the objective, name the dataset you should use, and give you a graphical target of what the final figure should look like. You do not need to recreate the same colors and formatting I used, just present the data with the appropriate graph features.

Please note that graphs presented on the subsequent pages were sometimes done using different datasets. This means that you cannot copy the numbers in these graphs, you must run the analyses yourself using the Excel files provided. Part of your evaluation relates to the accuracy of your analysis.

TURNING IN ASSIGNMENT AND GRADING

When you are done creating your graphs you will copy each one into the Microsoft PowerPoint template available in this module. Copy and paste your graphs as "Pictures (U)" or Pictures (Enhanced Metafiles)", one graph per slide. You should enlarge the graphs in PowerPoint so they fill the available space, **but please do not delete the target graph** in the upper right corner. Please make sure that you present the graphs in the order you see below, using the target graph as a guide – if you are missing a graph, leave that slide blank.

Please submit this assignment by the due date using D2L. Go to D2L, Activities, Assignments, and select the Week 6 Analytical Assignment to upload your final PowerPoint file. Make sure that you have named your file using your last name (e.g., "AnalyticalAssignment6_Wuschke.ppt").
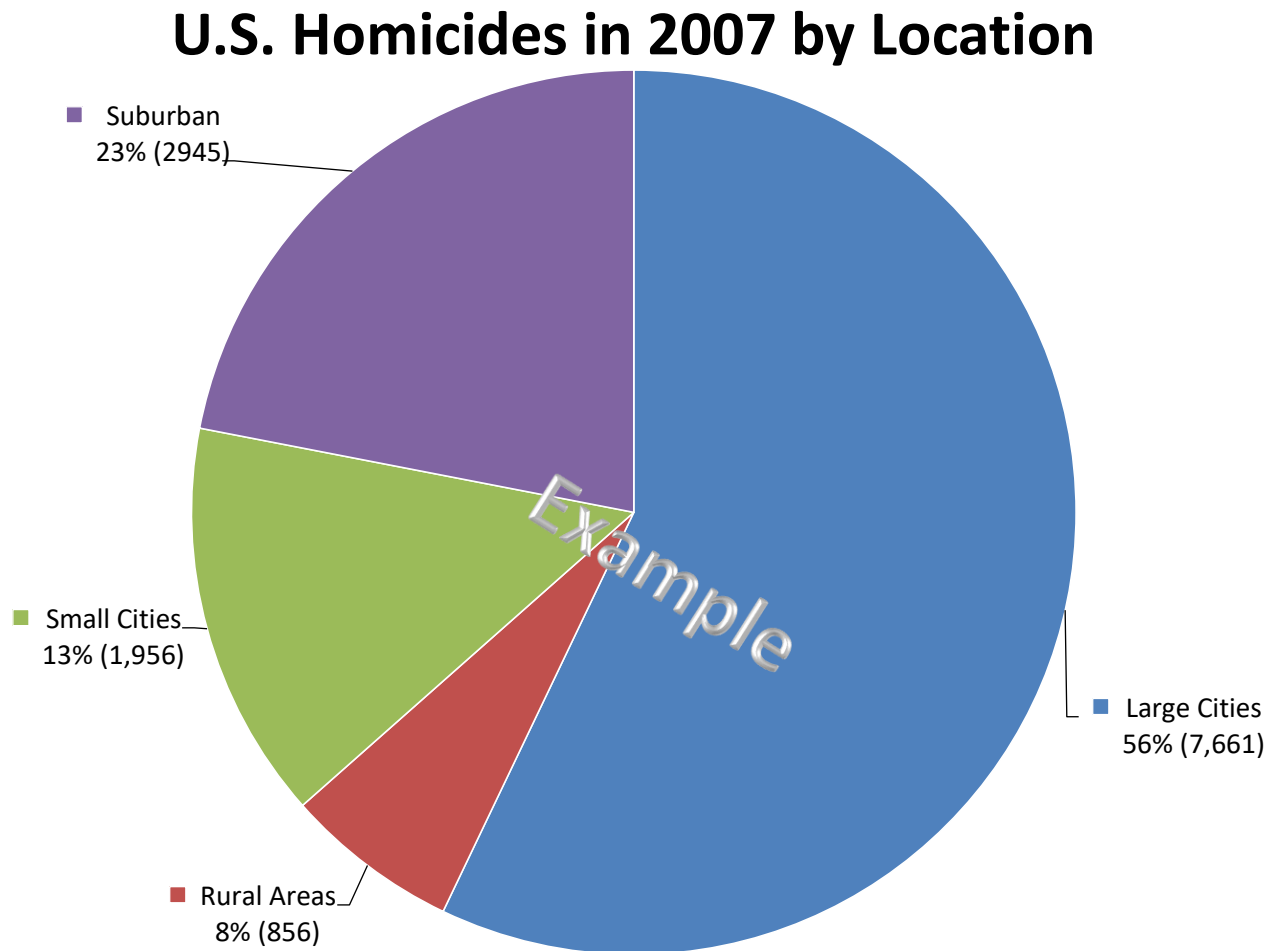
The first nine graphs will be evaluated using the rubric shown below.

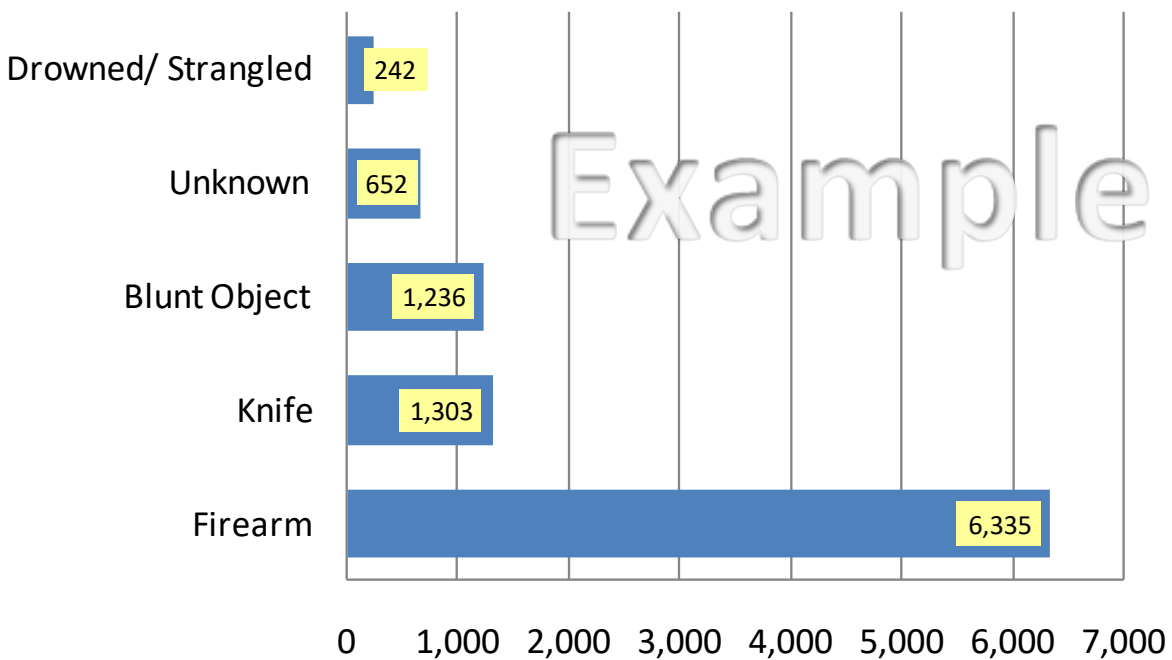| PRESENTATION	Missing	Missing 2+ major elements but some demonstrated effort	Major element missing or flawed (chart title, legend, wrong type of graph), or two minor problems	Minor element missing or flawed (e.g., no Y-axis label, axis font sizes are different, aspect ratio is off)	Exact match of sample graph or improved graph
	0	0.5	1	1.5	2
ANALYSES	Missing	Major problem(s) but demonstrated some effort	Major concern (eg: data presented in wrong format, but analysis completed appears correct)	Minor problems	No obvious problems
	0	0.5	1	1.5	2

SECTION 1   (WORKSHEET: *SHR 2007*)

In this section you will be using the 2007 SHR homicide data on victims to produce graphs that tell us something about these incidents.

Graph #1: **Pie Chart** depicting the location of the offenses for 2007. **Remember that your numbers will be different, so please provide your updated values**.

U.S. Homicides in 2007 by Location

Suburban
23% (2945)

Small Cities
13% (1,956)

Rural Areas
8% (856)

Large Cities
56% (7,661)

Graph #2: **Bar Chart** depicting the weapon used by homicide offenders. Please note that <u>the data you are provided for this chart are from a different year</u> than my sample below. Also, the categories in your data may be different. **This means you will want to use the weapon code and the SHR codebook provided to regroup weapon types to match this chart below.**

Type of Weapon Used in U.S. Homicides (1999)

Weapon	Count
Drowned/ Strangled	242
Unknown	652
Blunt Object	1,236
Knife	1,303
Firearm	6,335

0   1,000   2,000   3,000   4,000   5,000   6,000   7,000

Example

Graph #3: **Column Chart** depicting the race of victims and offenders involved in offenses. Note that I excluded records where race was not reported (i.e., missing data). Again, your data will be from a different year. Note that this graph requires you to merge two pivot tables together – **think back to your week 5 table on a similar topic for a hint into how to structure your data!**
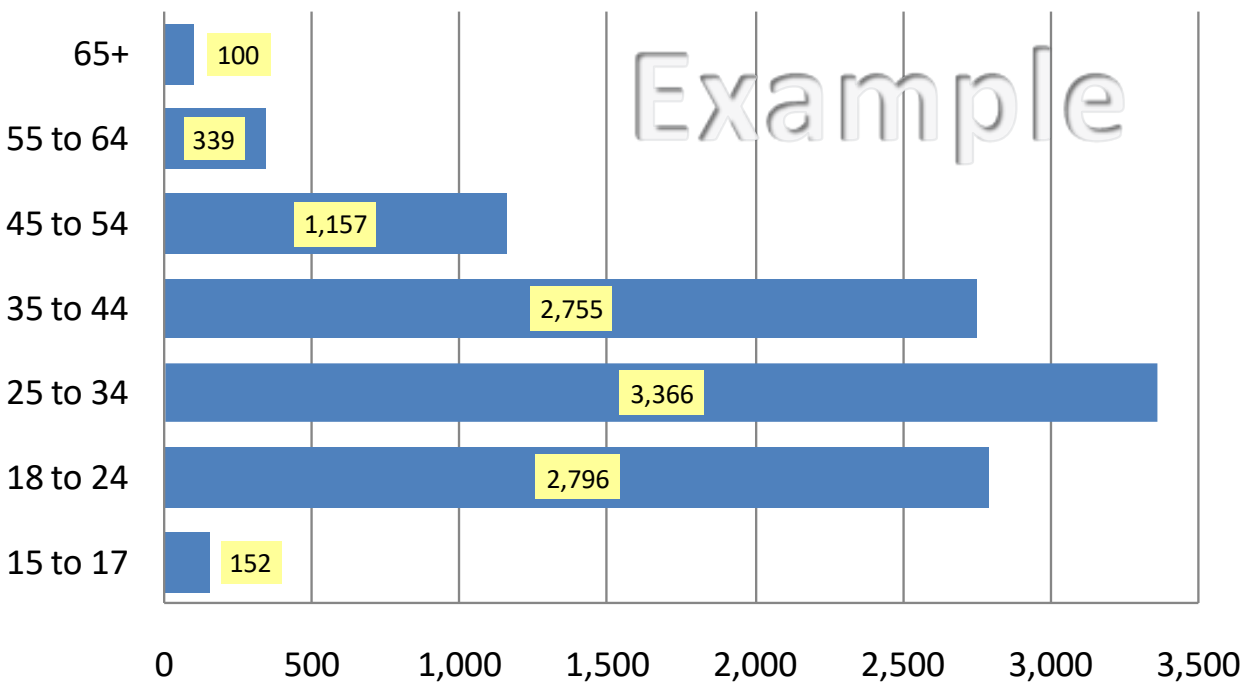
Race of Victims and Offenders in U.S. Homicides (1999)
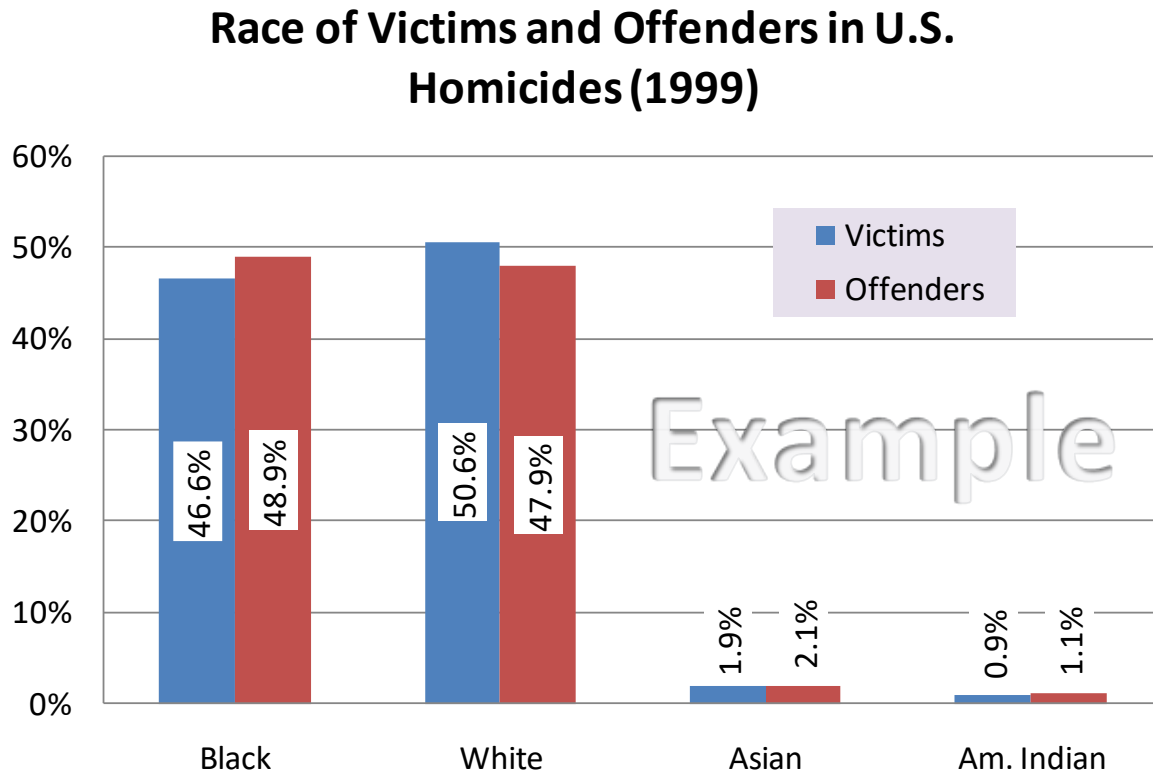
Excludes 104 victims and 3,191 offenders where race was unknown

In this section you will be using the data obtained from the Oregon Department of Corrections (DOC). The dataset contains all of the individuals who were in DOC prisons as of 01/01/2010. Please use this file to create the following graphs. Note that the data for the sample were from 2005 whereas your data are from 2010 – therefore your results will feature different counts. **To begin, you may need to add columns to your ODOC dataset in order to calculate ages.**

Graph #4: **Bar Chart** depicting individual's age at admission to the DOC on the current charge (i.e., use Date_Admit and DOB).

Age at admission for Individuals within the Oregon Department of Corrections (2005)

Age Group	Count
65+	100
55 to 64	339
45 to 54	1,157
35 to 44	2,755
25 to 34	3,366
18 to 24	2,796
15 to 17	152

Graph #5: **Column Chart** depicting the type of crime committed by Oregon DOC inmates broken out by sex. Note, in this case I used percentages within each sex and not the count of offenders, because there are so many fewer females than males. Be sure to replicate this format as closely as possible.

Primary Offense Committed by Male and Female Offenders in Oregon Dept. of Corrections (2005)
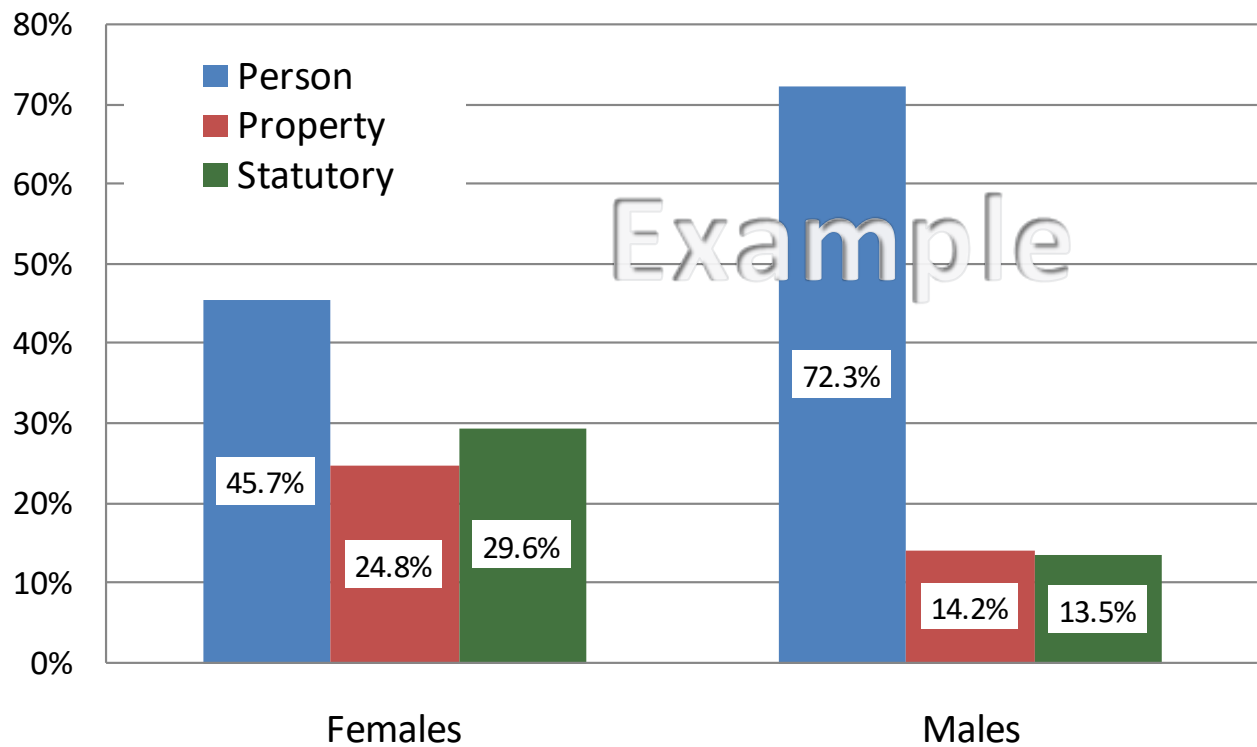
In this final section you will be using a file that contains criminal justice data aggregated by time, in this case by year. This type of data is ideally suited for time series graphs. Please produce a graph like each one of those depicted below.

Graph #6: **Time Series line graph** depicting the U.S. property crime rate by year from 1960 to 2008
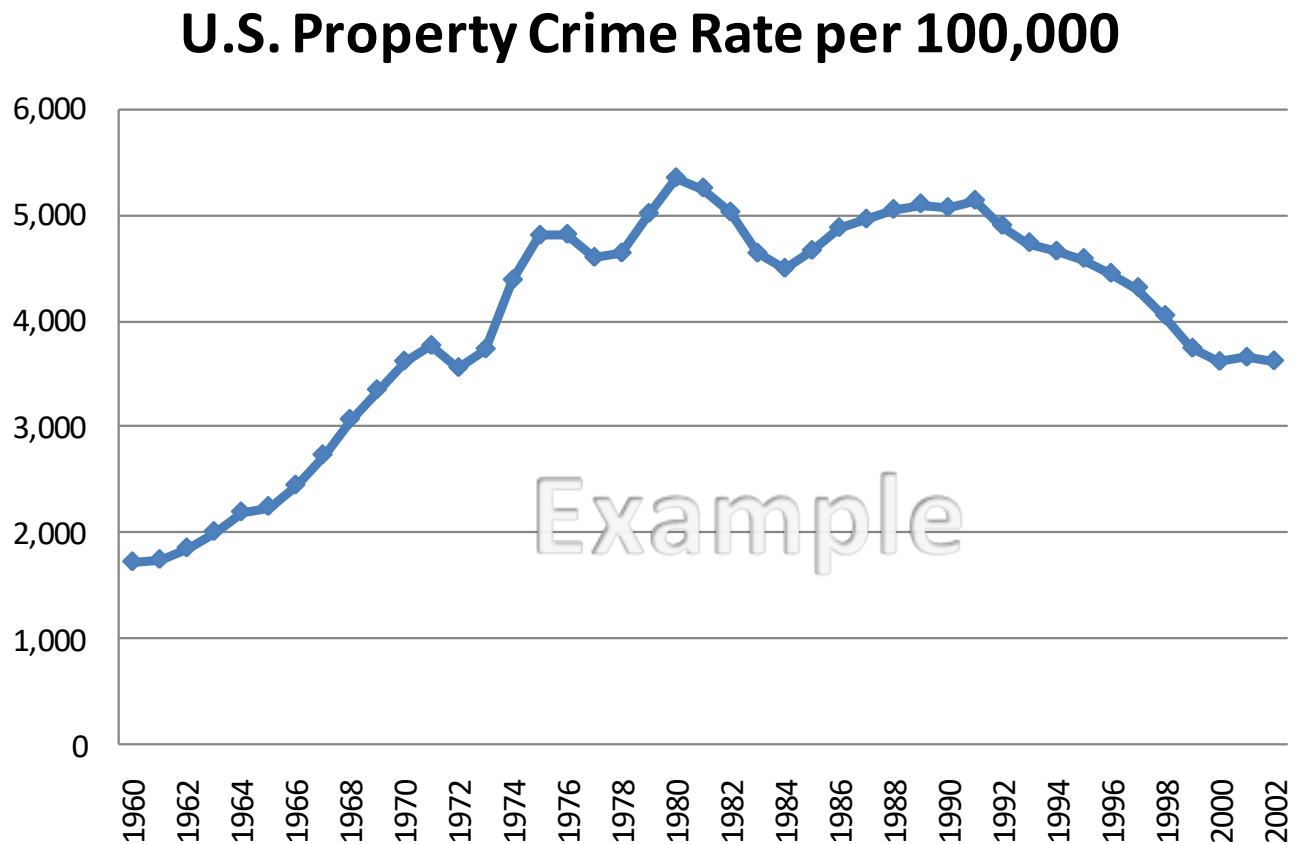
SECTION 4   (WORKSHEET: YOUR CHOICE)
Use the remaining data from any of the Excel files given to you in this module to create one final graph (i.e., something other than the ones above) from any of the provided data sources. Try to find data that are "graph worthy" in that your graph helps to see a pattern or relationship that might not be easily identifiable if it was presented in a table. When you are done, copy and paste the graphs to your PowerPoint file. The graph will be evaluated using the following rubric:

Graph #7: Your choice

	Missing	Missing 2+ major elements but some demonstrated effort	Major element missing or flawed (chart title, legend, wrong type of graph), or two minor problems	Minor element missing or flawed (e.g., no Y-axis label, axis font sizes are different, aspect ratio is off)	Professional quality graph
PRESENTATION	0	0.5	1	1.5	2
ANALYSES	Missing	Major problem(s) but demonstrated some effort	Major concern (eg: data presented in wrong format, but analysis completed appears correct)	Minor problems (eg: data selected are too simplistic or overly complicated)	No obvious problems with analyses – data selected are "worthy" - graph allows you see pattern might have missed in table
	0	0.5	1	1.5	2

SECTION 5   (PARAGRAPH RESPONSE)

Charts are useful presentation tools. They help us to simplify large, complex datasets into a visual image that helps to organize important content. Well-designed charts should be stand-alone, meaning that they should be able to be understood even without supplemental material. However, we rarely present such charts alone- often, they will form part of a presentation or paper. When this is done, it is important that the chart is integrated into the text itself, so that the text refers to important elements of the image.

Your final task is to write a paragraph or two to supplement your self-created chart. Be sure to start with an opening statement that describes the topic which you are exploring with your chart. Describe the data used in the creation of the chart. Explain key findings that your chart illustrates, and describe the importance or implications of these findings. Importantly, refer to the chart itself in your writing.

Your paragraph response is worth 5 points, and **should be typed onto the final PowerPoint slide of this week's Analytical Assignment PowerPoint file**. Once you have completed this step, save the file as a .pptx file, and submit it via this week's Assignment folder prior to the due date/time. You will not have an Analytical Assignment quiz to complete this week.

Paragraph Response: