For written assignments, you will need to attach three files:

Word Document (with responses to the assignment questions).

SPSS syntax file (to show the procedures you used in the analysis)

SPSS output file (to show the output you are using in your analysis)

Data File: BUCJ591DATA04ASEATTLECALLS2019.SAV

This data is calls made to the Seattle Police Department in 2019. The dataset contains information on when the call was place, where the call occurred, what type of call it was, and what was the response. The data also contains information on the time of the response, and the type of response.

HINT: There are several different filters that you will use during this assignment. Remember to remove the filter and select all cases before applying a new filter.

1. Contingency Table.
   1. Do a frequency distribution of the variable CALLTYPE – how many are “911” 118202 or “TELEPHONE OTHER, NOT 911” 74496 ?
   2. Select only CALLTYPE EQ “911” OR CALLTYPE EQ “TELEPHONE OTHER, NOT 911”
   3. Do a crosstab of RECPRIORITY BY CALLTYPE.
   4. What percentage of the 911 calls were the highest priority (level 1 or immediate)? 28.7%
   5. What percentage of the TELEPHONE OTHER, NOT 911 calls were the highest priority (level 1)? 11.2
   6. Is this a statistically significant relationship? Describe the statistic you selected and what it told you. Yes, I believe this to be a statistically significant relation since when there is a higher number of calls to 911, there is a higher number of calls that are immediate to respond to or more serious. For it to be a significant relationship, if the value of one variable increases or decreases, the values of another variable would change.
   7. Is the relationship strong or weak? Strong
   8. What other information would you want to look at to explore the different types of calls? I would like to see the types of calls in terms of what crime was reported and, in addition, at what times of day these various types of calls are made. I think it would be interesting to see which shift more officers see things and initiate (proactive) versus if people file in person more during days/weekends/nights, etc.
2. Contingency Table.
   1. Select only 911 calls.
   2. Do a crosstab of RECPRECINCT and RECPRIORITY.
   3. How many precincts are there in Seattle?
   4. Which precinct had the highest number of 911 calls?
   5. Which precinct had the highest percentage of 911 calls assigned to priority level 1?
   6. Is there a statistically significant relationship between precincts and the priority level of 911 calls?
   7. Is this relationship strong or weak?
   8. What other information would you want to look at next to explore this relationship?
3. Difference of Means. We are trying to answer the question, does the average response time differ by time of day. Daytime calls are those from 6:00 a.m. through 5:59 p.m. Nighttime calls are those from 6:00 p.m. to 5:59 a.m.
   1. Select on CALLTYPE = “911” and Priority = 1
   2. Do an difference of means test for the variable TIMERESPMIN and groups DAYORNIGHT
   3. How many total cases are in your sample? How many calls were made in the day? How many calls at night?
   4. What is the mean response time in the day? What is the standard deviation?
   5. What is the mean response time in the night? What is the standard deviation?
   6. Interpret the results of the Levene test of equality of variance? Explain your interpretation and whether you are assuming equal or unequal variances.
   7. Interpret the results of the t-test. Is there a significant difference? Which direction is the difference if any?
   8. What other questions would you want to ask to explain any differences in response times?
4. Difference of Means. We are trying to answer the question, does the average response time differ by the type of call – 911 compared with “TELEPHONE OTHER, NOT 911”.
   1. Select on CALLTYPE = “911” OR CALLTYPE = “TELEPHONE OTHER, NOT 911” and PRIORITY = 1
   2. Do an difference of means test for the variable TIMERESPMIN and groups CALLTYPE
   3. How many total cases are in your sample? How many calls were 911? How many calls were some other telephone?
   4. What is the mean response time for 911? What is the standard deviation?
   5. What is the mean response time for other telephone calls? What is the standard deviation?
   6. Interpret the results of the Levene test of equality of variance? Explain your interpretation and whether you are assuming equal or unequal variances.
   7. Interpret the results of the t-test. Is there a significant difference? Which direction is the difference if any?
   8. What other questions would you want to ask to explain differences in response time response times?
5. As part of the budget planning process in the city of Seattle you have been asked to provide a data fact sheet using empirical information from the calls for service data set that will inform funding priorities for staff and equipment. Using this data set:
   1. what variables would you use to help management allocate resources?
   2. In which precincts would you prioritize more funding?
   3. During which shifts or seasons would you prioritize allocating staff and other resources?
   4. Is there other data you would recommend including in this analysis?