Practice #2- SPSS

A researcher is interested in looking at the effects of alcohol on driving ability. A sample of 10 participants from the community reporting to regularly consume alcoholic beverages (at least 3 times per week) agreed to participate in the study. Participants were randomly assigned to one of two groups: the placebo group (no alcohol, condition=1) or the alcohol group (condition=2). In addition to recording the number of driving errors made and rating participants' coordination on a scale ranging from 1(very poor) to 10 (very good), the researcher also asked participants to report their gender (male=1, female=2) and age.

Here is the data.

Placebo Group:

1. female, age 23, errors=0, coordination=9
2. female, age 39, errors=2, coordination=8
3. male, age 25, errors=0, coordination=10
4. male, age 32, errors=1, coordination=7
5. female, age 24, errors=3, coordination=8

Alcohol Group:

1. male, age 22, errors=8, coordination=3
2. female, age 34, errors=6, coordination=4
3. male, age 21, errors=7, coordination=5
4. male, age 28, errors=9, coordination=2
5. female, age 26, errors=8, coordination=4

1. Create an SPSS data file with five variables: condition, gender, age, driving errors, and coordination. Label all of the variables appropriately and then enter the corresponding data.

2. Calculate the means and standard deviations for age, driving errors, and coordination for all 10 participants.

3. Create a new variable for participants' ability to react where high scores means that participants react slowly. Call the variable **react** and create it by reverse scoring coordination ratings. If coordination=10, react=1, if coordination=9, react=2, etc. Calculate the mean and standard deviation for the new variable react.

4. Create a composite variable for overall driving ability that is the total of driving errors and ability to react (i.e., add react and error scores for each participant). Call the variable **ability**. Calculate the mean and standard deviation for the new variable **ability**.

5. Use the select if command to calculate the mean and standard deviation for ability for the alcohol group and then separately calculate the mean and standard deviation for ability for the placebo group.

6. Graph the mean ability ratings for males and females in both the alcohol and placebo groups using a clustered bar graph. The graph should have four bars- male and female for alcohol, male and female for placebo.