Assignment07:

1. (5 points) Explain ODS to your grandmother in less than 30 words. Use PUT statement to print out your answer in LOG panel.

2. (10 points) Using the resulting data set created in Assignment06 – #9b (from SASHELP.HEART), add SAS code to create a summary table showing mean, variance and range in decimal point of 2 for Height, Weight and BMI grouped by sex. Add histogram for BMI by each sex group.

3. (20 points) Using the SAS dataset you used for Assignment02-#10, Assignment03-#3, Assignment05-#9, Assignment06-#10 again, write a SAS code to do the following tasks.

    a. Using PROC EXPORT, export the first half of observations to an excel file named 'Assignment07_Q3.xlsx' in a sheet need as 'dataset_a'.
    b. Write a DATA step to export the second half of observations to an excel file named 'Assignment07_Q3.xlsx' in a sheet need as 'dataset_b'.

4. (20 points) Using the dataset SASHELP.VTABLE, write the SAS code to export the result table from PROC MEANS for 2 variables 'nobs' and 'nvar' to an excel file named as 'Assignment07_Q4.xlsx'. Make sure to include the (min median mean max) of each variable and the sheet name to be 'sashelp_dataset_description'.

5. (20 points) Using the Excel file 'M05_class_data.xlsx' from Module05, write SAS program to analyze the data in Module00 sheet including the following tasks. You can add any additional analyses to investigate any hypothesis of your choice. Make sure to enhance your analyses reports with titles, footnotes, and labels.

    a. Using LIBNAME and XLSX engine, import 'M05_class_datat.xlsx' file.
    b. Explore and analyze each variable in Module00 and create summary statistics, tables and graphs.
    c. Choose two variables of your choice and analyze the relationship between them. Create proper reports, tables and graphs.
    d. Export the report with all analyses result in PDF, HTML, and PPTX format to present your result.

6. (20 points) Open `p105a07.sas` from the EPG1V2/activities folder. First, run the program and examine the results to see examples of other procedures that analyze and report on the data. Then, change the values of the macro variables `Year` and `basin` to another valid values of your choice (i.e., make sure to choose the values available in the `pg1.storm_final` dataset). Change the conditional value of `maxwindmph` to add the label for the storms with the smaller values of `maxwindmph`. You can explore the color and the size of the label but make sure the resulting labels are legible. Run the code up to the line 47 (the 1st PROC SGPLOT) and submit the map and graph results.

7. (5 points) After finishing 'Lesson 6: Essentials' in Section2, take a screen shot, i.e., the whole screen with all 3 components in red box (**your name**, **check marks** for finished Lessons, and **Progression Bar**).

8. (extra 5 points) Discussion07.