MICROSOFT EXCEL: DESCRIPTIVE STATISTICS

Requests

1. Download the **Chol_DB.xls** file and save it in **Lab07** folder.
2. Insert a new sheet and name it as <u>Histograms</u>. Copy in this sheet the quantitative continuous variables.
3. Create for the whole sample the histograms of Cholesterol variable using the following intervals of classes: ≤131, (131-175], (175-219], (219-263], (263-307], (307-351], >351.
4. Using the same intervals as above-presented, create the histogram of Cholesterol separately for femal and male.
5. What can you say about the normality of cholesterol? (visually interpret it all 3 histograms).
6. Under assumption of normal distribution, compute descriptive statistics parameters for all quantitative variables. Put the results in a new seet called <u>Descriptive statistics</u>.
7. Calculate the 95% confidence intervals for means for all quantitative variable separately for female and male. What can you say about the difference of cholesterol between female and male?
8. Create a PowerPoint representation with the following structure:

   - 1st slide: title (Summaries of Quantitative Variables), author (your name) and authors' affiliation (as the name of University and of the Faculty).
   - 2nd slide: Type of variables (title). For each variable, please identify:
     - Type of variable: qualitative vs quantitative (discrete / continuous).
     - Scale of measurement: Nominal, Ordinal, Interval, Ratio.
   - 3rd slide: *Histogram of "Cholesterol"* as title. Copy the Histogram obtained for whole sample.
   - 4th slide: *Histogram of "Cholesterol"* as title. Copy the Histogram obtained for female.
   - 5th slide: *Histogram of "Cholesterol"* as title. Copy the Histogram obtained for male.
   - 6th slide: *Descriptive statistics* as title. Create a table in this slide to include the following parameters for Cholesterol (whole sample): mean and 95% confidence interval, median, kurtosis, skewness; and Count.
   - 7th slide: *Descriptive statistics* as title. Include the same information as on the previous slide for male and female.
   - 8th - xth slide: *Results Interpretation* as title. Interpret the results presented in 6th and 7th slides.
   - (x+1)th slide: compare the mean of cholesterol obtained for male with the mean of cholesterol obtained for the female – please use the values of the 95% confidence interval.
   - Final slide: The end slide.
   - Save the presentation as Descriptive Statistics2 on Lab07 folder as PowerPoint Show.