

## Instructions

Upload your own **solutions** to the corresponding Canvas Assignment on or before 26/11/2021.

Grading basis:  
Complete/incomplete

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## Applying SPSS

Download and use (on campus or via VPN) the program from the UT-software site (NSC-site). Use SPSS to create the tables and graphs as mentioned below. Submit via Canvas on the Assignment that corresponds to use of SPSS (do not submit together with Homework #1).

**Data.** This is the same data set as in Homework #1. It represents the number of views that a set of YouTube videos has gotten. For the context please read (and ideally solve) Part 1 of the homework first.

45000, 57000, 61000, 55000, 30000, 50000, 33000, 89000, 53000, 102000,  
75000, 77000, 43000, 27000, 67000, 30000, 52000, 78000, 111000, 179000,  
87000, 13000, 47000, 32000, 68000, 26000, 85000, 51000, 5000, 55000

### Instructions.

1. Run SPSS and select *New Dataset*. Make sure you are on *Data View* and enter the data above in a single column.
2. Use the *Variable View* tab, left/down in the SPSS screen, to give the variable a **Name** containing your own first name (e.g. `Num_views_Pippin`, if Pippin is your name). Choose a **Label** likewise (e.g. `Pippin's number of views per video`). Set the number of *Decimals* to 0, since the observations are integers.
3. Determine with SPSS the **classical numerical summary** (you can use this to check your results in Part 1 of the homework). Follow the menus:

*Analyze* → *Descriptive Statistics* → *Descriptives*.

In each menu select your variable and click on *Options...* in order to select the statistics you want to compute.

Note that SPSS does not report the kurtosis itself, but instead the “excess kurtosis” which is defined as  $kurtosis - 3$ .

4. Make SPSS produce a **box plot** and a **histogram** of the number of views.
  - Histogram via: *Graphs* → *Legacy Dialogs* → *Box Plot*.  
Choose *Simple* and *Separate variables*.
  - Histogram via: *Graphs* → *Legacy Dialogs* → *Histogram*.  
Give the graph the title “Histogram of ...” (your first name) and choose the option to display the *Normal Curve* in the histogram.
5. Use SPSS to graph both the **exponential** and **normal** Q-Q plot.  
Go to: *Analyze* → *Descriptive Statistics* → *Q-Q plots*.
6. Copy and save the required results (one table and 4 graphs) in a Word/PDF file. Change the dimensions such that it all fits in at most two pages. You can now submit to Canvas.