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**Assignment 2 – Data analysis and
visualization**

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You should present your work on 10th week on your classes. Late presentations will not be accepted.

Before you start this assignment remember that cheating is not acceptable in any form.

Requirements:

1. ***Read the tasks carefully, try to follow a description of tasks.***

2. ***Do not forget to comment your code and make a user friendly program.*** ☺

Tasks (static for all the coming labs, outputs must be readable and beautiful)

Please, create sensible class and variable names and follow the naming conventions.
For any output use a string formatting. e.g. *f"…", "…".format(…), "…%" % (…).*

Use try-except to deal with errors and avoid program crush.

Requirements

1. You can get any web resource with any data that can be analyzed and visualized. E.g.

    a. Stock Exchanges (you can choose another)

        i.   https://kase.kz/en/stock_market/index_kase/

        ii. https://www.nasdaq.com/market-activity/currencies

        iii. https://www.nasdaq.com/market-activity/cryptocurrency

        iv. https://www.londonstockexchange.com/

        v.   Yahoo Finance (recommended)

    b. Markets of devices

        i.   Alser.kz

        ii. Kaspi.kz/shop

        iii. Shop.kz

        iv. Any other of your choice

    c. Some social statistics

        i.   https://www.un.org/en/global-issues/population#:~:text=The%20world's%20population%20is%20expected,nearly%2011%20billion%20around%202100.

        ii. https://datacommons.org/place/Earth?utm_medium=explore&mprop=fertilityRate&popt=Person&cpv=gender%2CFemale&hl=en

Some tools that you would like to use are:

1. Pandas - https://pypi.org/project/pandas/
2. MatPlotLib - https://pypi.org/project/matplotlib/
3. BeautifulSoup4 - https://pypi.org/project/beautifulsoup4/
4. Requests - https://pypi.org/project/requests/

You can create:

1. Pie charts
2. Bar charts
3. Scatter Plots
4. Heat maps
5. Any other suitable representation chart or plot