

## INTELLIGENT SYSTEM DEVELOPMENT

### EXERCISE 3

#### Request

- Students write the answers and results of code & running program in file doc
- Due date: 1 week

#### SELECT FEATURES

1. Present techniques for selecting features with example code and running results
  - a. <https://towardsdatascience.com/feature-selection-techniques-in-machine-learning-with-python-f24e7da3f36e>
  - b. <https://www.kdnuggets.com/2021/06/feature-selection-overview.html>
  - c. <https://www.geeksforgeeks.org/feature-selection-techniques-in-machine-learning/>
  - d. <https://www.kaggle.com/code/piyushagni5/feature-selection-techniques-in-machine-learning>
  - e. <https://www.analyticsvidhya.com/blog/2020/10/feature-selection-techniques-in-machine-learning/>
  - f. <https://www.javatpoint.com/feature-selection-techniques-in-machine-learning>
  - g. <https://trainindata.medium.com/feature-selection-for-machine-learning-a-comprehensive-overview-bd571db5dd2d>
2. Student use data from link of classifying prices of mobile phone and execute 3 techniques you present in Question 1 (refer to link 1.a)  
<https://www.kaggle.com/datasets/iabhishekoofficial/mobile-price-classification>
3. Present 3 techniques with data from Chap 12

#### CLEANING DATA

1. Cleaning data: steps with python. Present steps and examples
  - a. <https://www.analyticsvidhya.com/blog/2021/06/how-to-clean-data-in-python-for-machine-learning/>  
using data: <https://www.kaggle.com/c/sberbank-russian-housing-market/data> .
  - b. [https://www.tutorialspoint.com/python\\_data\\_science/python\\_data\\_cleansing.htm](https://www.tutorialspoint.com/python_data_science/python_data_cleansing.htm)
2. Demo steps of cleaning the following data. Record code and running results on file doc
  - a. [https://www.w3schools.com/python/pandas/pandas\\_cleaning.asp](https://www.w3schools.com/python/pandas/pandas_cleaning.asp)
  - b. <https://realpython.com/python-data-cleaning-numpy-pandas/>

Here are the datasets that we will be using in **b**:

- [BL-Flickr-Images-Book.csv](#) – A CSV file containing information about books from the British Library
- [university\\_towns.txt](#) – A text file containing names of college towns in every US state
- [olympics.csv](#) – A CSV file summarizing the participation of all countries in the Summer and Winter Olympics

You can download the datasets from Real Python's [GitHub repository](#)