Assignment 8: Scale and train/test selection

General instructions:

- Use the file “assignment_8_template.py” to do the assignment. Change the name of the file to “assignment_8.py”.
- Write your code after the comment: “#Your code here:” (do not modify the code before this comment)
- Office hours information are available in the office hours channel on Teams.
- Authorized libraries (you cannot import other library than the authorized ones):
    - numpy
    - scikit-learn

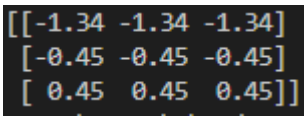
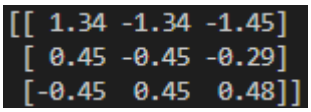
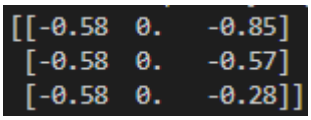
Deadline:

- 01/12/2022 at 23:59:59
- Delayed submissions are not allowed

Coding instruction:

- The program is fed with three inputs. Input1, input2 and input3 are three lists of features. So input1, input2 and input3 will be a text with a list of items ("1,2,3,4,5,6" for example). **Do not use the “input()” function**. Use input1, input2 and input3 as define in the template.
- Input1, input2 and input3 are your features. There is no label (you don’t need labels because you will not create any model).
- Your objective to standardize your features and select and train and a test sets:
    - First, create a 3 columns matrix from the inputs (check assignment 6) (use reshape() and hstack() function of numpy)
    - **Second,** use a scaler object for your features to standardize them.
    - **Third,** use the train_test_split() function of sklearn to create your test and train sets (75 % of your data is train set). **In the train_test_split() function, use the parameter “shuffle = False” !**
- The output is the train standardized set.
- The function to transform the input strings into lists is already written in the template.
- **The function to print the rounded result is already written in the template. You have to use this exact function where “data_x_train” is your standardized and scaled train features!**

Tests Information:

Input1 (string)	**Input1** (string)	**Input3** (string)	**Expected output** (string)
"1,2,3,4"	"6,7,8,9"	"11,12,13,14"	
"-1,-3,-5,-7"	"100, 101, 102, 103"	"20,23,25,27"	
"0,0,0,1"	"1,1,1,1"	"200,210,220,290"	

Upload instructions:

- When your code is finish and work. Upload it to codepost.io (Tutorial here)
- You can reupload your code as many times as you want until the deadline
- The last upload is taken into account, so if you success all tests but reupload another file which is not working, you assignment will be failed.
- The expected name for your file is “assignment_8.py”. If the name is different, your code will fail.