Vidzeme University of Applied Sciences

**Faculty of Engineering**

Introduction to Python and Data Exploration

group 08

practical work #4

Valmiera, 2023

CONTENT

1 Code Structure 4

2 Error handling 5

List of used resources 6

APPENDIX 1 7

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| --- | --- | --- | --- |
| Document versions | | | |
| Version | Status / Changes | Date | Author |
| 1.0 | Made the program | 06.03.2023 | Rainers Krūmiņš |
| 2.0 | Changed so it can read Latvian letters | 06.03.2023 | Rainers Krūmiņš |

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| --- | --- | --- | --- |
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**GOAL.** Made a program that reads 2 files (one in Latvian, the other in English) and prints out the letters in decreasing order of frequency.

# Code Structure

**NB! In the open() function correct data file name/ location needs to be written (in case the file location or name is different)**

* Calling method getLetterFrequency() for Latvian and English files.

Text

Description automatically generated with medium confidence

* The getLetterFrequency() method consists of:

-Extracts all the letters from the file and set them to lowercase.



-Counting the frequency of letters and putting them in a dictionary. Each time a letter appears, the count increases.

Text

Description automatically generated with medium confidence

-Calculates the percentage of the letter appearing in the file and sorts it in decreasing order depending on how often the letter appears. Saves the results in a dictionary and returns it.

Text

Description automatically generated

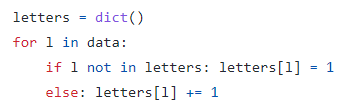
* Prints out the English and Latvian letters with their percentage in decreasing order.

Text

Description automatically generated

# Error handling

* If the letter appears for the first time, it makes a new key and the value is 1



# List of used resources

Introduction to Python and Data Exploration - Dr.sc.ing., Kaspars Osis

# APPENDIX 1

\_pyt2023\_group08\_pw4.zip

\_pyt2023\_group08\_pw4\_rainers\_krumins.zip

\_pyt2023\_group08\_pw4\_ricards\_didriksons.zip