

IT501 Introduction to Programming

Homework 4

Please write a python method for each question and submit your solution to succurse before due date.

Submission Rules:

- You should create only one file for all questions
- You should put your solutions into separate cells.
- Your file names should contain your name and last name. E.g.

AhmetDemirelliHomework4.ipynb

- You cannot use Turkish characters in your file names or variable names
- You should write the question number as a comment before each method name.

1. Write a method that returns the count of palindromes in a given file.

Input \rightarrow "palindromes.txt" (There is no sample file, you should create this file manually) Output \rightarrow 8

Write a method that returns only distinct words from a given file. Input → "meyveler.txt" (you should create this file manually)
Output → {"elma", "armut", "şeftali", "muz", "ananas", "kayısı", "portakal", "karpuz", "nar", "üzüm"}

meyveler.txt

elma armut şeftali muz ananas kayısı şeftali portakal armut nar muz kayısı üzüm ananas elma karpuz nar muz şeftali armut ananas portakal nar

3. Write a method that translates a given file containing Turkish words into English and writes into another file. (There will be only 10 predefined distinct words in the file.) Hint: Keep the translation information in a **dict**

Input (names of the files) \rightarrow ("turkish.txt", "english.txt") Output \rightarrow no output

turkish.txt

elma, armut, şeftali, muz, ananas, kayısı, şeftali, portakal, armut, nar, muz, kayısı, üzüm, ananas, elma, karpuz, nar, muz, şeftali, armut, ananas, portakal, nar

english.txt

apple, pear, peach, banana, pineapple, apricot, peach, orange, pear, pomegranate, banana, apricot, grape, pineapple, apple watermelon, pomegranate, banana, peach, pear, pineapple, orange, pomegranate



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4. Write a method that reads (using numpy loadtxt. method) the date and the dollar value information from given text file and draws a graph using matplotlib.

(You can download and use **dolar.txt** file from SUCourse+)

Sample scatter plot for all data;

