

Fourth Industrial Revolution (4IR) Summer School

Python Programming – Day 4 exercises

Files

Question 1 [File String manipulation]

Write a Python program that allows you to do the following text manipulation after reading the text from the (input.txt).

- Convert uppercase letter to a lowercase letter and vice versa in file
 - [Store new file in output1.txt]
- Asks the user for a word and its replacement. Then finds and replaces all word occurrences in the input file.
 - [Store new file in output2.txt]
- Remove empty lines from the input file
 - [Store new file in output3.txt]

input.txt

```
I am enjoying my summer school at KFUPM

----- Module 1

Learning Python programming is fun and simple.
```

output1.txt

```
i AM ENJOYING MY SUMMER SCHOOL AT kfupm

----- mODULE 1

lEARNING pYTHON PROGRAMMING IS FUN AND SIMPLE.
```

output2.txt

(Replace KFUPM with King Fahd University of Petroleum and Minerals)

```
I am enjoying my summer school at King Fahd University of
Petroleum and Minerals

----- Module 1

Learning Python programming is fun and simple.
```

output3.txt

```
I am enjoying my summer school at KFUPM
----- Module 1
Learning Python programming is fun and simple.
```

Question 2 [Frequent word in file]

Write a Python program that reads the input file (Article.txt) and outputs the most 3 frequent words in the article.

Question 3 [Compare files]

Write a Python program to compare two files and decides whether they have identical content or not. Use (file1.txt, file2.txt, file3.txt) as test cases.