



Homework 5:

- **Show ALL Work, Neatly and in Order.**
- **No** credit for Answers Without Work.
- For written questions, submit a single pdf file includes all of your solutions.
- **DO NOT** submit individual files or images.
- For coding questions, submit **ONE** `.py` file and include your comments.

E.1:

In part of this exercise, you will use regular expression.

- i. Load Email.txt dataset.
- ii. Find all email addresses in the text file.
- iii. Verify the results.

An email address usually follows these rules:

- Upper or lower case letters or digits
- Starting with a letter
- Followed by a the at sign symbol.
- Followed by a string of alphanumeric characters. No spaces are allowed
- Followed by a the dot “.” symbol
- Followed by a domain extension(e.g., “com”, “edu”, “net”.)

E.2:

In part of this exercise, you will use regular expression.

- i. Load war and peace by By Leo Tolstoy.
- ii. Check line by line and find any proper name ending with “..ski” then print them all.
- iii. Put all the names into a dictionary and sort them.

E.3:

In part of this exercise, you will use regular expression.

- i. Write a program with regular expression that joins numbers if there is a space between them (e.g., "12 0 mph is a very high speed in the 6 6 interstate." to "120 mph is a very high speed in the 66 interstate.")
- ii. Write a program with regular expression that find the content in the parenthesis and replace it with "(xxxxx)"
- iii. Write a program that find any word ends with "ly".
- iv. Write a program that finds all the quotes in the text and prints the strings in between.
- v. Write a program that finds all words which has 3,4,5 characters in the text.
- v. Write a program that replaces a comma with a hyphen.
- vi. Write a program that extract year, month and date from any url which has date init which follows by forward slashes. "https://www.yahoo.com/news/football/wew/2021/09/02/odell-famer-rrrr-on-one-tr-littleball-norman-stupid-author/"

E.4:

Answer all the class exercise questions and submit it (Check the instructions).