Exercises 08

String
700

Dead Line:
1401/12/15

String

Exercise 1

- Count the number of characters (characters frequency) in a string and print the result as a dictionary!

- Example: input: 'Filoger' , output: {'f': 1, 'i': 1, 'l': 1, 'o': 1, 'g': 1, 'e': 1, 'r': 1}

String

Exercise 2

- Replace 'Google' with the 'ChatGPT' the following text and print that again!

'Google is the border of science and innovation!'

- Example: output: 'ChatGPT is the border of science and innovation!'

String

Exercise 3

- Get the current data and time and print the output (same as example)

points:

- use **datatime** library to get the data and time
- use **f-string** to print the output!

- `output: Current date is Feb 2 2023, and the time is 14:51`

String

Exercise 4 (Search)

- How many time 'filoger' is repeated in the following text?

  'about FILOGER: Filoger is an educational institute that focuses on AI. filoger is the biggest farsi-speakers AI community.'

points:

- use **f-string** to print the output!
- Uppercase and lowercase letters do not matter.

- `output: Filoger is repeated 3 times in the text!`

Exercises 09

Function
600

Dead Line:
1401/12/15

Function

Exercise 1

- Write a Python function to print the odd numbers from a given list.

- Sample List : [1, 2, 3, 4, 5, 6, 7, 8, 9], Expected Result : [1, 3, 5, 7, 9]

Function

Exercise 2

- Write a Python function to calculate first n numbers of Fibonacci sequence. (n is function input)

points:

- Use iteration to solve the question!

- `input: 7, output: 0 1 1 2 3 5 8`

Function

Exercise 3

- Write a Python function to sort a given list of dictionaries (employees) using Lambda. (Sort by age, then for same ages, sort by name)

employees = [{"name": "Sanaz", "age": 14}, {"name": "AmirHossein", "age": 18}, {"name": "Azam", "age": 14}, {"name": "Zahra", "age": 16}, {"name": "Shayan", "age": 18}, {"name": "Zahra", "age": 17}]

- output: [{"name": "Azam", "age": 14}, {"name": "Sanaz", "age": 14}, {"name": "Zahra", "age": 16}, {"name": "Zahra", "age": 17}, {"name": "AmirHossein", "age": 18}, {"name": "Shayan", "age": 18}]