# Assignment #3

### General Instructions:

The assignment should be performed **independently** – no collaborations are allowed.

**Late submission** will lead to a reduction in your grade – 5 points per day.

Assignment will be uploaded to **GitHub**.

In the course’s Moodle you should go to the assignment activity and upload a text file, named:

hw-<id>.txt, where <id> is your ID number. The file should contain the URL of your repository, for example: [https://github.com/israel\_israeli/*DS\_Intro\_HW\_3*](https://github.com/israel_israeli/DS_Intro_HW_3)

### Tasks

1. write a function named read\_line(n, file) that takes as an input an int and a string representing a file name, and returns the nth line of the txt file, if it exists.

**Return type**: str.

**For example:**

read\_line(4, ex3\_text.txt) should return: " There is much more to black holes than meets the eye. In fact,".

read\_line(9, ex3\_text.txt) should return: " ".

read\_line(29, ex3\_text.txt) should return: "line 29 doesn't exist".

read\_line("c", ex3\_text.txt) should return: "invalid input detected".

read\_line(9, ex4\_text.txt) should **return**: "file not found".

Note:

1. You may **NOT** assume that "n" can only be an int.In any other case of an invalid input (that is, n is not an int), you should return the **exact** following string: "invalid input detected"
2. You may **NOT** assume that"file" exists.In that case and in any other case of an invalid input, you should return the **exact** following string: "file not found"
3. Write a function named longest\_words(file) that takes a stringrepresenting a file name as an input and returns a list of the first **5** longest words of the txt file, if the file exists, in descending order.

**Return type**: list of strings.

**For example:**

longest\_words(ex3\_text.txt) should return: ['electromagnetic', 'gravitational', 'Consequently', 'calculations', 'ultraviolet'].

longest\_words(ex4\_text.txt) should print: "file not found" and return an empty list.

Notes:

You may **NOT** assume that"file" exists.In that case and in any other case of an invalid input, you should print the **exact** following string: "file not found” and return an empty list.