

python3 student_no.py # takes inputs from the terminal and displays results (if any).

python3 student_no.py<input1.txt # it takes inputs from input1.txt and displays the result in the terminal.

python3 student_no.py<input1.txt>myoutput.txt # it takes the inputs from input1.txt and creates the myoutput.txt document and writes the result here.

diff output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt.

diff --ignore-all-space output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt without ignoring the spaces.

QUESTION 1

You are given a list of words. Your task is to group these words based on their lengths. Each group should contain words of the same length.

For example, if the list of words is ["cat", "dog", "batman", "ok", "bats", "map"], you should group the words into separate lists, where each list contains words that are of the same length. The output should be a dictionary where the keys represent the word lengths, and the values are lists of words that have that particular length.

Additional Information:

- The input list may contain words of varying lengths.
- The output should be organized so that all words of the same length appear together.
- You may assume that the words in the input list are non-empty strings.

Note: It is mandatory to use a function.

<u>Input1</u>	<u>Input2</u>
["cat", "dog", "batman", "ok", "bats", "map"]	["apple", "banana", "kiwi", "grape", "orange"]
<u>Output 1</u> <pre>{ 2: ['ok'], 3: ['cat', 'dog', 'map'], 4: ['bats'], 6: ['batman'] }</pre>	<pre>{ 4: ['kiwi'], 5: ['apple', 'grape'], 6: ['banana', 'orange'] }</pre>