Bahria University,

Karachi Campus



COURSE: CEN-409 ARTIFICIAL INTELLIGENCE &

MACHINE LEARNING

TERM: FALL 2023, CLASS: BCE- 7A

Submitted By:

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(Name) (Reg. No.)

Submitted To:

Engr. Qasim Hassan

Signed Remarks: Score:

Bahria University,

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ASSIGNMENT NO.

**\_4\_**

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | Write a Python program to sort Counter by value. |
| 2 | Write a Python program to store dictionary data in a JSON file. |
| 3 | Write a Python program to remove a specified dictionary from a given list. |
| 4 | Write a program (using functions!) that asks the user for a long string containing multiple words. Print back to the user the same string, except with the words in backwards order. |
| 5 | Write a recursive function to compute Ntn Fibonacci number. Test and trace for N = 6 is 8. We remember that a Fibonacci number can be recursively defined as:  , where . |
| 6 | Implement BFS & DFS in python as describes in the class. |

Submitted On:

**\_\_\_15 - 10 - 2023\_\_\_**

(Date: DD/MM/YY)

**Task 1:**

Write a Python program to sort Counter by value.

**Solution:**

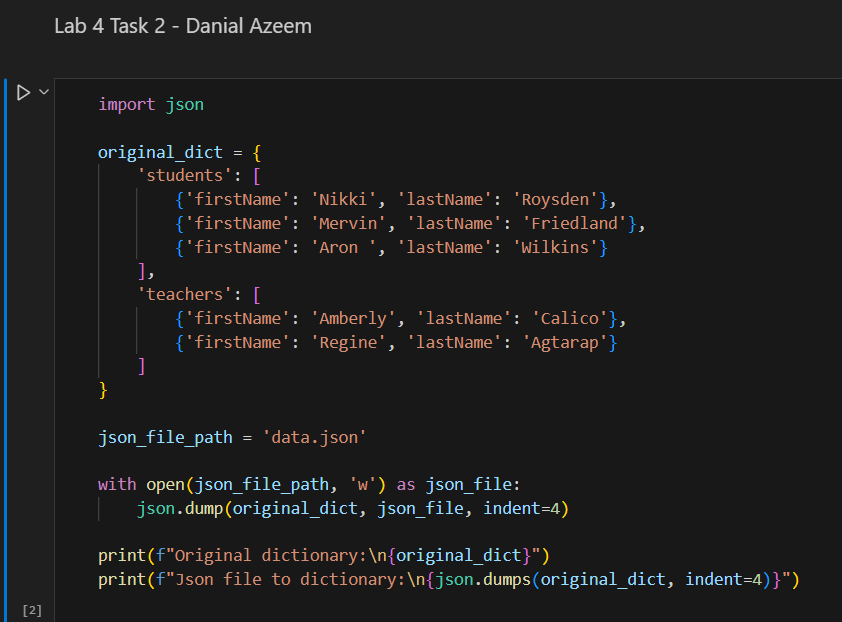
**A screen shot of a computer program

Description automatically generated**

**Task 2:**

Write a Python program to store dictionary data in a JSON file.

**Solution:**

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**A screenshot of a computer

Description automatically generated**

**Task 3:**

Write a Python program to remove a specified dictionary from a given list.

**Solution:**

**A screenshot of a computer program

Description automatically generated**

**Task 4:**

Write a program (using functions!) that asks the user for a long string containing multiple words. Print back to the user the same string, except with the words in backwards order.

**Solution:**

**A screenshot of a computer program

Description automatically generated**

**Task 5:**

Write a recursive function to compute Ntn Fibonacci number. Test and trace for N = 6 is 8. We remember that a Fibonacci number can be recursively defined as:

, where .

**Solution:**

A computer screen shot of a number

Description automatically generated

**Task 6:**

**Implement BFS & DFS in python as describes in the class.**

**Solution:**

A screenshot of a computer program

Description automatically generated

A computer screen shot of a program code

Description automatically generated