

## NNDL ASSIGNMENT – 2

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Github link: [https://github.com/VyshnaviNagalla/Assignment\\_2](https://github.com/VyshnaviNagalla/Assignment_2)

### Question 1:

Used two variables first\_name and last\_name to store the value given by the user and used + operator to concatenate both strings and stored that value in another variable named full\_name. For the string alternative created a function named string\_alternative and created a variable named result to store the final output and length for storing the length of the string and used for loop and stored alternative character of the string in the result and print the result.



```
[1] first_name = str(input())
last_name = str(input())
Full_name = first_name + last_name
print(Full_name)

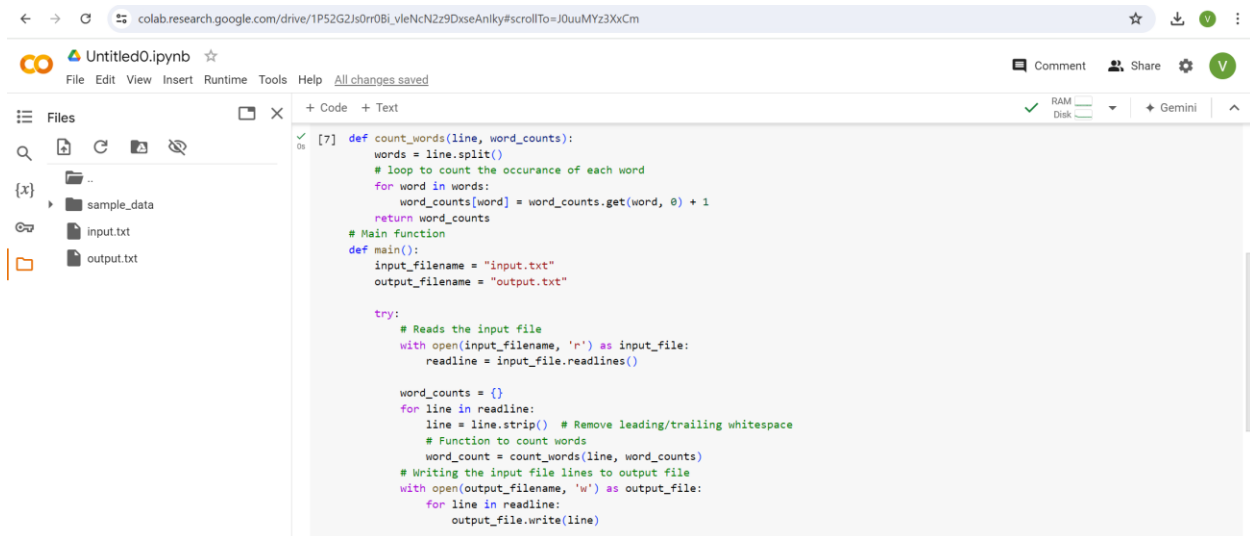
def string_alternative(name):
    result = ''
    length = len(name)
    for idx in range(length):
        if not idx % 2:
            result += name[idx]
    return result;

Str = "Good evening"
result = string_alternative(Str)
print(result)

Vyshnavi
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```

### Question 2:

Created a text file named testfile.txt as the input file and used the open function for opening the input file. Created a list named lst to store the words in the testfile.txt and used for to traverse the lines of the testfile.txt. In order to store words in list used the split function and stored all words in lst and used the count function to count the words that are stored in lst and print it.

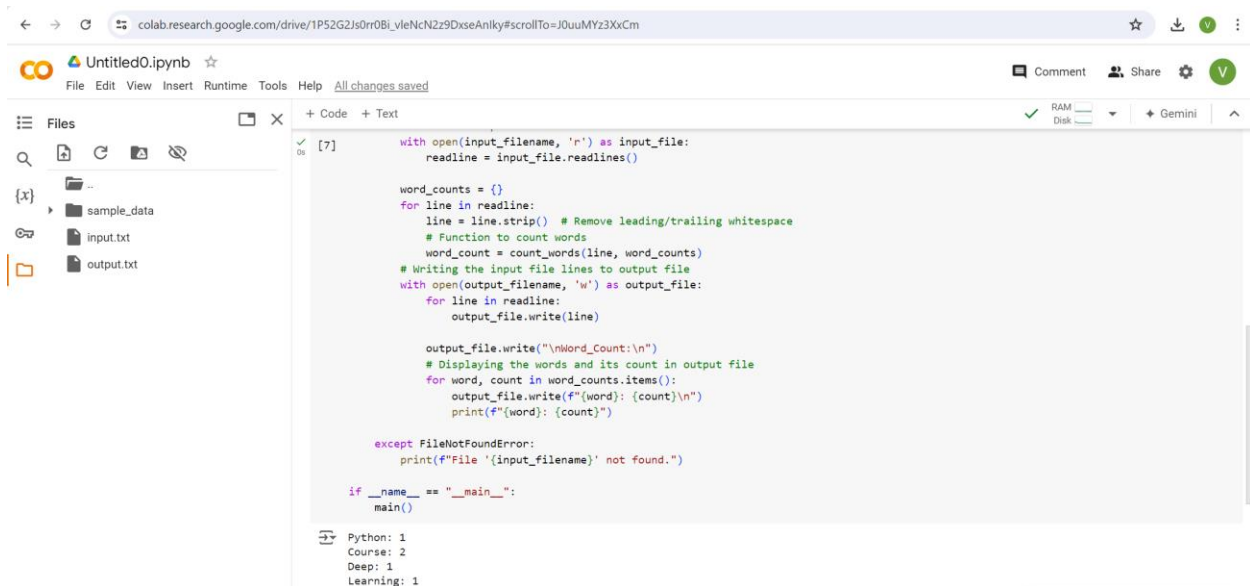


The screenshot shows a Google Colab notebook titled "Untitled0.ipynb". The left sidebar displays a file explorer with a folder named "sample\_data" containing "input.txt" and "output.txt". The main code area contains a Python script with the following logic:

```
[7] def count_words(line, word_counts):
    words = line.split()
    # loop to count the occurrence of each word
    for word in words:
        word_counts[word] = word_counts.get(word, 0) + 1
    return word_counts
# Main function
def main():
    input_filename = "input.txt"
    output_filename = "output.txt"

    try:
        # Reads the input file
        with open(input_filename, 'r') as input_file:
            readline = input_file.readlines()

        word_counts = {}
        for line in readline:
            line = line.strip() # Remove leading/trailing whitespace
            # Function to count words
            word_count = count_words(line, word_counts)
            # Writing the input file lines to output file
            with open(output_filename, 'w') as output_file:
                for line in readline:
                    output_file.write(line)
```



The screenshot continues the Python script from the previous block. It includes error handling for file not found and a final print statement for the word counts.

```
        with open(input_filename, 'r') as input_file:
            readline = input_file.readlines()

        word_counts = {}
        for line in readline:
            line = line.strip() # Remove leading/trailing whitespace
            # Function to count words
            word_count = count_words(line, word_counts)
            # Writing the input file lines to output file
            with open(output_filename, 'w') as output_file:
                for line in readline:
                    output_file.write(line)

                output_file.write("\nWord_Count:\n")
            # Displaying the words and its count in output file
            for word, count in word_counts.items():
                output_file.write(f"{word}: {count}\n")
                print(f"{word}: {count}")

        except FileNotFoundError:
            print(f"File '{input_filename}' not found.")

if __name__ == "__main__":
    main()
```

Below the code, the runtime status is shown:

```
Python: 1
Course: 2
Deep: 1
Learning: 1
```

### Question 3:

Created a variable named data for storing the input taken from the console and created a function for converting inches into centimetres. Created a new list for storing the converted data , appended the values to the list, and printed it.

```
except FileNotFoundError:
    print(f"File '{input_filename}' not found.")

if __name__ == "__main__":
    main()

Python: 1
Course: 2
Deep: 1
Learning: 1
```

```
data = input("enter customer heights : ")

def inchToCent(value):
    return value * 2.54

height = data.split()

new_list = []

for x in height:
    value = int(x)
    new_list.append(inchToCent(value))

print("output:", new_list)
```

```
enter customer heights : 150 155 145 148
output: [381.0, 393.7, 368.3, 375.92]
```

Video Link:

<https://drive.google.com/file/d/1pwOsQyEauh1gzaYsNaWkJuGGXRGSabwO/view?usp=sharing>