Assignment-2

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GitHub Link: https://github.com/Mohith700/Assignment_2.git

Video Link:
https://drive.google.com/file/d/1kubL8MLujpPA6Nv6rkc4ZN5hEiAz8_zk/view?usp=drive_link

1)

```
def fullname(firstname, lastname):
    return firstname + " " + lastname

def string_alternative(full_name):
    return full_name[::2]

def main():

    firstname = input("Enter your first name: ")
    lastname = input("Enter your last name: ")


    full_name = fullname(firstname, lastname)


    Alt_Char = string_alternative(full_name)


    print("Full Name:",full_name)
    print("Every Other Character in Full Name:", Alt_Char)


main()
```

O/P

```
Enter your first name: Mohith
Enter your last name: Degala
Full Name: Mohith Degala
Every Other Character in Full Name: Mht eaa
```

2)

```
def word_count_per_line(file_path):
    word_count_dict = {}
    lines = []


    with open(file_path, 'r') as file:
        lines = file.readlines()


    for line in lines:
        words = line.strip().split()
        for word in words:
            word_count_dict[word] = word_count_dict.get(word, 0) + 1


    print("Input:")
    for line in lines:
        print(line.strip())

    print("Word_Count:")
    for word, count in word_count_dict.items():
        print(f"{word}: {count}")


    with open('output.txt', 'w') as output_file:
        output_file.write("Input:\n")
        output_file.writelines(lines)
        output_file.write("\nWord_Count:\n")
        for word, count in word_count_dict.items():
            output_file.write(f"{word}: {count}\n")


word_count_per_line('input.txt')
```

O/P

```
Input:
Python course
Deep learning course
Word_Count:
Python: 1
course: 2
Deep: 1
learning: 1
```

3)

```python
a = int(input("Enter number of element in list: "))
inches=[]
cm = []
for i in range(a):
  element = int(input(f"enter {i} number in list: "))
  inches.append(element)

for i in inches:
  cm.append(i*2.54)


list_comprehension_output = [i*2.54 for i in inches]
print("Nested Interactive Loop:",cm)
print("List Comprehension:",list_comprehension_output)
```

O/P

```
Enter number of element in list: 4
enter 0 number in list: 1
enter 1 number in list: 2
enter 2 number in list: 3
enter 3 number in list: 3
Nested Interactive Loop: [2.54, 5.08, 7.62, 7.62]
List Comprehension: [2.54, 5.08, 7.62, 7.62]
```