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Course: Programming Languages for Data Engineering

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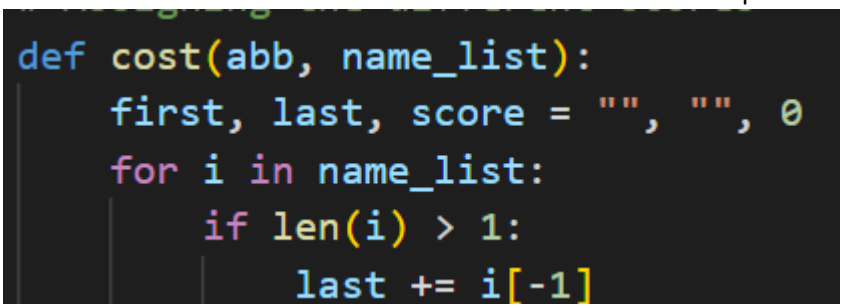
REPORT

Link of GitHub:

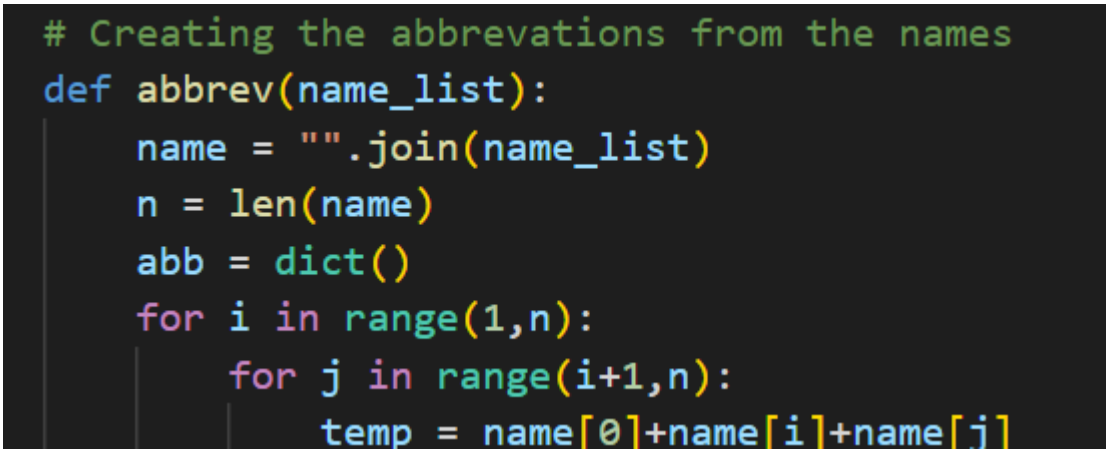
https://github.com/BeginnerPythonEnthusiast/Python_Assignment_Akanksha

1. We have taken the input as the file trees.txt and the values.txt file which contain the names and the score associated with the letters.
2. Then the data has been cleaned as we removed any unwanted characters like “-”, “ ‘ ” etc.
3. The score for different letters and the other rules has been implemented in below code.



```
def cost(abb, name_list):
    first, last, score = "", "", 0
    for i in name_list:
        if len(i) > 1:
            last += i[-1]
```

4. Then we create the abbreviation of three words where all the abbreviations should have first letter in them and if not then we ignore those abbreviations.



```
# Creating the abbrevations from the names
def abbrev(name_list):
    name = "".join(name_list)
    n = len(name)
    abb = dict()
    for i in range(1,n):
        for j in range(i+1,n):
            temp = name[0]+name[i]+name[j]
```

5. Since the abbreviation should be such that it should be unique and shall not be existing in any of the other words’ abbreviations, we will make sure of that through the code.
6. In input we will provide the file trees.txt so that I can be evaluated, and all the functions created can be implemented on that.
7. The result gests are stored in the **Final_Result.txt** file

```
# Saving our final result in different file named as Final_Result.txt
    for i in range(len(mylist)):
        for j in range(i + 1, len(mylist)):
            temp = mylist[i].intersection(mylist[j])
            if len(temp)>0:
                common+=temp
    out = open("Final_Result.txt","w")
```

8. Result we got on Console:
   Thus, output matches our expected result as it follows all the rules mentioned