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1  """
2  # Name: Jett Mu
3  # Team: We Sense
4  # Intermediate Division
5  # ACSL Contest #2
6  # Date of Program: 02/02/2020
7  # Grade: 7th
8  # Language: Python
9  # Input Data Method: Use an external text file readfile.txt in the same location as
10 this script
11 """
12 import string
13 #Turning input into usable list
14 try:
15     txtfile = open("readfile.txt","r")
16     text = list(txtfile)
17     txtfile.close()
18     antetextlist = []
19     textlist = []
20     for a in text:
21         antetextlist.append(list(a))
22     for b in range(len(antetextlist)):
23         textlist.append([])
24         textlist[b].append([])
25         for ba in antetextlist[b]:
26             if ba != " " and ba != "\n":
27                 textlist[b][len(textlist[b])-1].append(ba.capitalize())
28             elif ba == " " and antetextlist[b][antetextlist[b].index(ba)+1] != " ":
29                 textlist[b].append([])
30
31 #Cancel out similar letters
32 letterdict = {}
33 for a1, a2 in enumerate(string.ascii_uppercase):
34     letterdict[a2] = a1 + 1
35 def shorten(TheList, num, num2):
36     text = ""
37     for forb in TheList[num][num2]:
38         if forb != "0":
39             text = text + forb
40     return list(text)
41 def shortens(TheList, num):
42     for fora in range(2):
43         TheList[num][fora] = shorten(TheList, num, fora)
44 for c in range(len(textlist)):
45     try:
46         done = 0
47         FinalNum = 0
48         while done == 0:
49             done = 1
50             if len(textlist[c][0]) >= len(textlist[c][1]):
51                 loop = len(textlist[c][1])
52             else:
53                 loop = len(textlist[c][0])
54             for ca in range(loop):
55                 if textlist[c][0][ca] == textlist[c][1][ca]:
56                     done = 0
57                     textlist[c][0][ca], textlist[c][1][ca] = "0", "0"
58             shortens(textlist, c)
59             if len(textlist[c][1]) > len(textlist[c][0]):
60                 loop2 = len(textlist[c][0])-1
61             else:
62                 loop2 = len(textlist[c][1])-1
63             did = 0
64             for cb in range(loop2):
65                 for cba in range(1,-1,-1):
66                     if did == 0:
67                         if textlist[c][cba][cb+1] == textlist[c][1-cba][cb]:

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67         done = 0
68         did = 1
69         textlist[c][cba][cb] = "0"
70         shortens(textlist, c)
71     shortens(textlist, c)
72     #Turn letters into data
73     try:
74         if len(textlist[c][0]) >= len(textlist[c][1]):
75             letteramt = len(textlist[c][1])
76             otheramt = len(textlist[c][0]) - letteramt
77             which = 0
78         else:
79             letteramt = len(textlist[c][0])
80             otheramt = len(textlist[c][1]) - letteramt
81             which = 1
82         for d in range(letteramt):
83             FinalNum = FinalNum +
84             letterdict[textlist[c][0][d]] - letterdict[textlist[c][1][d]]
85         for e in range(otheramt):
86             FinalNum = FinalNum + 1
87         print(str(c+1) + ": " + str(FinalNum))
88     except:
89         print("Warning: Line " + str(c+1) + " has an invalid character. Please
90             put letters A-Z in the file.")
91 except:
92     print("Warning: Line " + str(c+1) + " needs to have two strings separated
93         with one space.")
94 except:
95     print("Warning: Please put readfile.txt into the same folder as this script.")
```