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1 import os, platform, sys, subprocess, copy, filecmp, time
2
3 """
4 Ejercicio 7. Desarrollar un script que detecte ficheros duplicados en un directorio
  (por ejemplo
5 el directorio /tmp) y automáticamente los elimine de dicho directorio
6 """
7
8 """
9 Definition of the main method of the program
10 Nombre: main
11 Fecha de creacion: 11/03/2021
12 Miembros: Roberto Jiménez y Alberto Pérez
13 Última modificación: 11/03/2021
14 Parámetros: Parameters are passed in the calling process
15 """
16 def main():
17     if platform.system() != 'Linux':
18         #Check if is a UNIX machine
19         print("Error, the OS is not a UNIX machine. Getting out...")
20         exit(1)
21     if len(sys.argv) == 1:
22         #Case when parameters are not passed to the script
23         directory = input("Your current directory is: " + os.getcwd() + " please
insert another"+
24             " directory to compare: " + '\n' )
25         if(os.path.isdir(directory)):
26             deleteDuplicateFiles(os.getcwd(), directory)
27         else:
28             print("Error, the passed directory does not exist")
29     elif len(sys.argv) == 2:
30         #Case when a parameter is passed to the script
31         directory = input("Directory passed:" + sys.argv[1] + " please insert
another"+
32             " directory to compare: " + '\n' )
33         if(os.path.isdir(directory)):
34             deleteDuplicateFiles(sys.argv[1], directory)
35         else:
36             print("Error, one of the directories does not exist")
37     elif len(sys.argv) == 3:
38         #Case when 2 parameters are passed to the script
39
40         if(os.path.isdir(sys.argv[1]) and os.path.isdir(sys.argv[2])):
41             deleteDuplicateFiles(sys.argv[1], sys.argv[2])
42         else:
43             print("Error, one of the directories does not exist")
44
45     else:
46         print("Error, the parameters are not necessary")
47
48
49
50
51 """
52 Deletes the duplicate files
53 Nombre: deleteDuplicateFiles
54 Fecha de creacion: 11/03/2021
55 Miembros: Roberto Jiménez y Alberto Pérez
56 Última modificación: 11/03/2021
57 Parámetros:

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58     Entry:
59     - dir1: First directory for getting the files
60     - dir2: Second directory for getting the files
61     Out:
62     """
63     def deleteDuplicateFiles(dir1, dir2):
64         filesDir1 = subprocess.getoutput("ls " + dir1).split() #Get a list of files from
        directory1
65         filesDir2 = subprocess.getoutput("ls " + dir2).split() #Get a list of files from
        directory2
66
67
68         for file1 in filesDir1:
69             for file2 in filesDir2:
70                 #Compares if the name of two files is the same
71                 if file1 == file2:
72                     pathFile1 = dir1 + "/" + file1
73                     pathFile2 = dir2 + "/" + file2
74
75                     #Compares if the content of two files is the same
76                     if filecmp.cmp(pathFile1, pathFile2, shallow=False):
77                         dateTimeFile1 = (time.ctime(os.path.getctime(pathFile1)),
78 pathFile1)
79                         dateTimeFile2 = (time.ctime(os.path.getctime(pathFile2)),
80 pathFile2)
81                         borrar = max(dateTimeFile1[0], dateTimeFile2[0])
82                         #Deletes the newest file
83                         if(borrar == dateTimeFile1[0]):
84                             os.system("rm " + dateTimeFile1[1])
85                             print("File: " + dateTimeFile1[1] + " deleted")
86                         elif(borrar == dateTimeFile2[0]):
87                             os.system("rm " + dateTimeFile2[1])
88                             print("File: " + dateTimeFile2[1] + " deleted")
89
90 if __name__ == "__main__":
91     """
92     De esta forma, se comprueba en python para que al ejecutarse el script
93     vaya a la función indicada en este caso main.
94     """
95     main()
```