Prac09：

os\_demos.py & modifications

*"""  
CP1404/CP5632 Practical  
Demos of various os module examples  
"""*import shutil  
import os  
  
  
def main():  
 *"""Demo os module functions."""* print(**"Starting directory is: {}"**.format(os.getcwd()))  
  
 *# Change to desired directory* os.chdir(**'Lyrics/Christmas'**)  
  
 *# Print a list of all files in current directory* print(**"Files in {}:**\n**{}**\n**"**.format(os.getcwd(), os.listdir(**'.'**)))  
  
 *# Make a new directory  
 # The next time you run this, it will crash if the directory exists  
 # TODO: Use exception handling to avoid the crash (just pass)* try:  
 os.mkdir(**'temp'**)  
 except:  
 pass  
  
 *# Loop through each file in the (current) directory* for filename in os.listdir(**'.'**):  
 *# Ignore directories, just process files* if os.path.isdir(filename):  
 continue  
  
 new\_name = get\_fixed\_filename(filename)  
 print(**"Renaming {} to {}"**.format(filename, new\_name))  
  
 *# TODO: Try these options one at a time  
 # Option 1: rename file to new name - in place  
 # os.rename(filename, new\_name)* new\_name2 = get\_fixed\_filename2(new\_name)  
 print(**"Renaming {} to {}"**.format(new\_name, new\_name2))  
  
 *# Option 2: move file to new place, with new name  
 # shutil.move(filename, 'temp/' + new\_name)* shutil.move(filename, **'temp/'** + new\_name2)  
  
  
def get\_fixed\_filename(filename):  
 *"""Return a 'fixed' version of filename."""* new\_name = filename.replace(**" "**, **"\_"**).replace(**".TXT"**, **".txt"**)  
 return new\_name  
  
def get\_fixed\_filename2(filename):  
 new\_name = filename.replace(**"\_"**, **"-"**)  
 return new\_name  
  
  
def demo\_walk():  
 *"""Process all subdirectories using os.walk()."""* os.chdir(**'Lyrics'**)  
 for directory\_name, subdirectories, filenames in os.walk(**'.'**):  
 print(**"Directory:"**, directory\_name)  
 print(**"**\t**contains subdirectories:"**, subdirectories)  
 print(**"**\t**and files:"**, filenames)  
 print(**"(Current working directory is: {})"**.format(os.getcwd()))  
  
 *# TODO: add a loop to rename the files* new\_name = filenames.replace(**" "**, **"\_"**).replace(**".TXT"**, **".txt"**)  
 os.rename(filenames, new\_name)  
  
  
main()  
*# demo\_walk()*

cleanup\_files.py

*"""  
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Demos of various os module examples  
"""*import shutil  
import os  
  
  
def main():  
 *"""Demo os module functions."""* print(**"Starting directory is: {}"**.format(os.getcwd()))  
  
 *# Change to desired directory* os.chdir(**'Lyrics/Christmas'**)  
  
 *# Loop through each file in the (current) directory* for filename in os.listdir(**'.'**):  
 *# Ignore directories, just process files* if os.path.isdir(filename):  
 continue  
  
 new\_name = get\_fixed\_filename(filename)  
 print(**"Renaming {} to {}"**.format(filename, new\_name))  
  
  
def get\_fixed\_filename(filename):  
 *"""Return a 'fixed' version of filename."""* new\_name = filename.capitalize()  
 new\_name = filename.replace(**" "**, **"\_"**).replace(**".TXT"**, **".txt"**)  
 list(enumerate(new\_name))  
 str = **'\_'** for i, char in enumerate(new\_name):  
 if new\_name[i].islower() and new\_name[i+1].isupper():  
 str.join()  
 return new\_name  
  
  
main()  
*# demo\_walk()*

sort\_files\_1.py

import shutil  
import os  
  
def main():  
 print(**"Starting directory is: {}"**.format(os.getcwd()))  
 os.chdir(**'FilesToSort'**)  
 file\_list = os.listdir(**'.'**)  
 ext\_list = []  
 for file in file\_list:  
 if os.path.isdir(file):  
 continue  
 *# Get extension* ext = os.path.splitext(file)[1]  
 ext\_list.append(ext)  
 try:  
 os.mkdir(ext.strip(**'.'**))  
 except:  
 pass  
 shutil.move(file, os.path.join(ext.strip(**'.'**), os.path.basename(file)))  
  
main()

sort\_files\_2.py