Módulo OS

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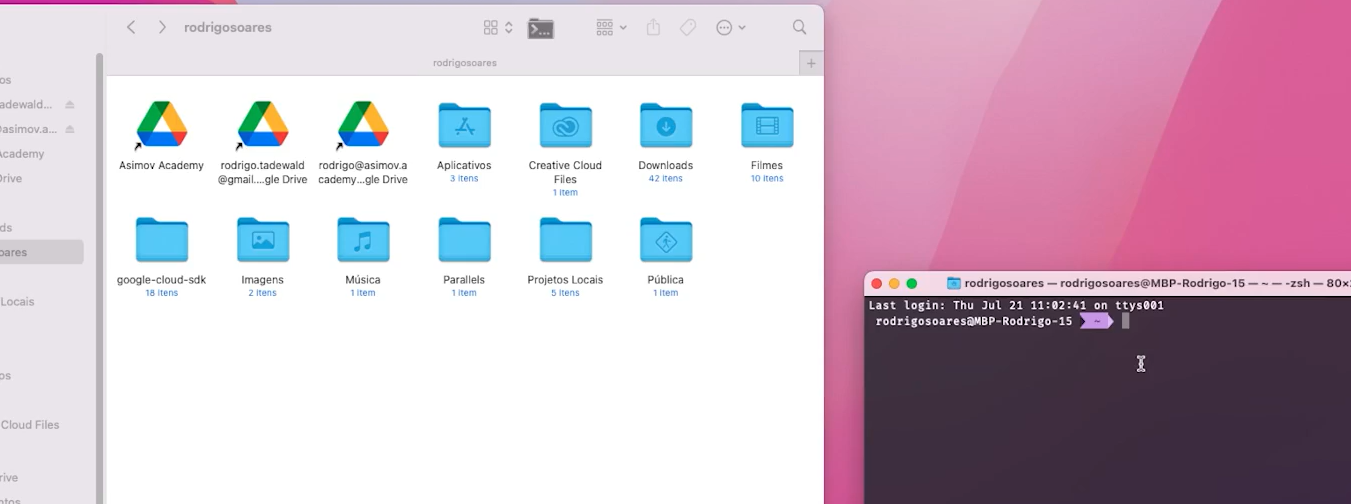
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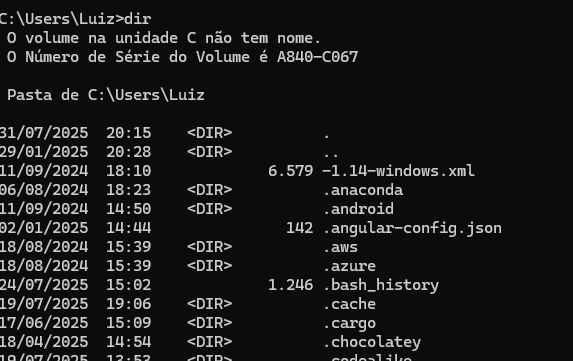
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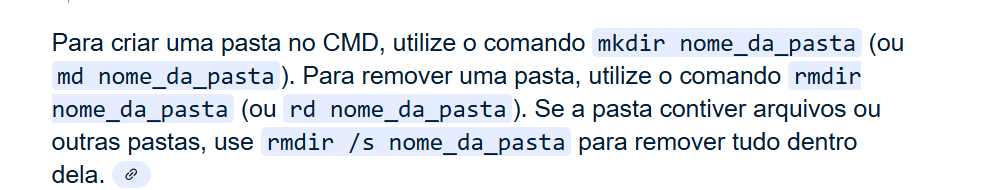
# [Automações básicas com OS](https://hub.asimov.academy/curso/atividade/automacoes-basicas-com-os/)

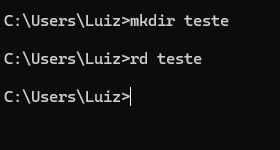
Podemos fazer tudo no terminal



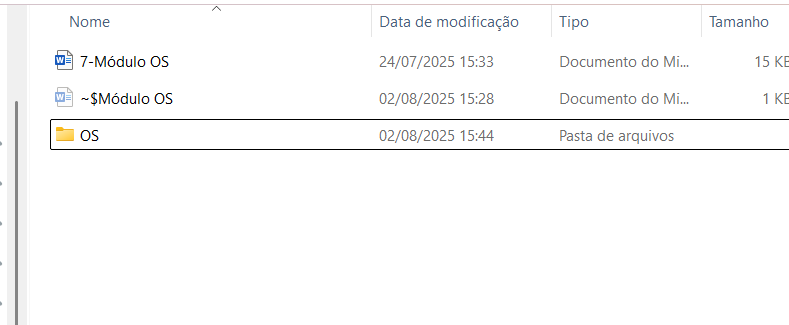


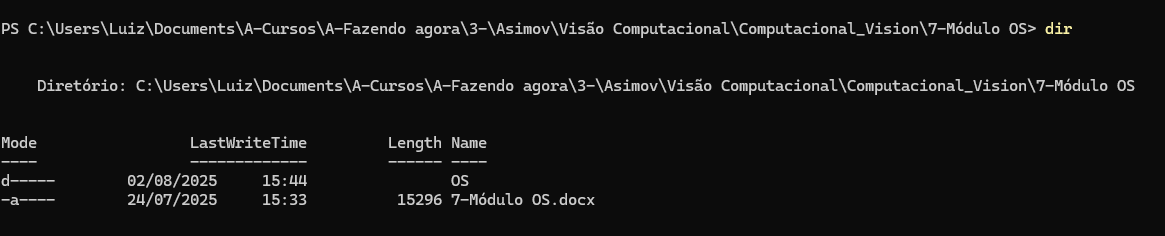




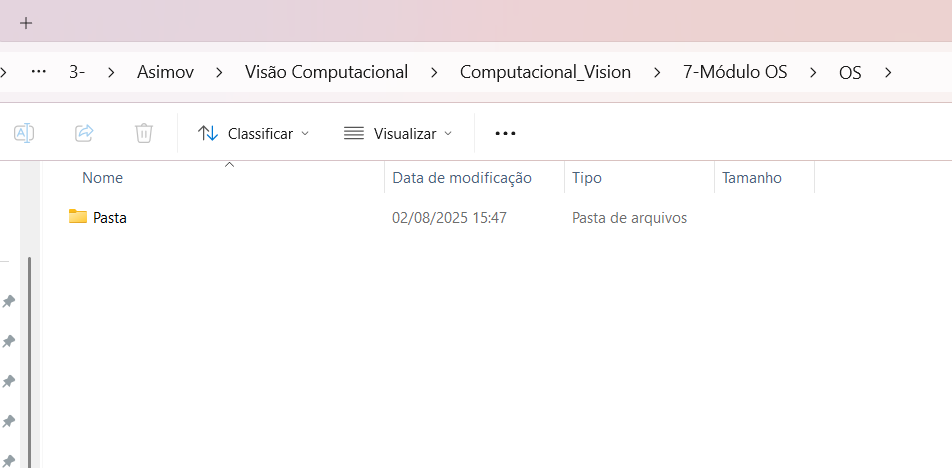


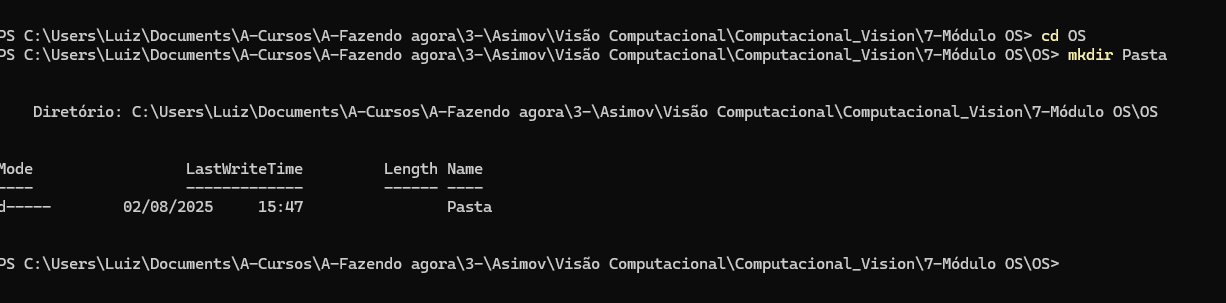
N apasta do projeto criar uma pasta chamada OS



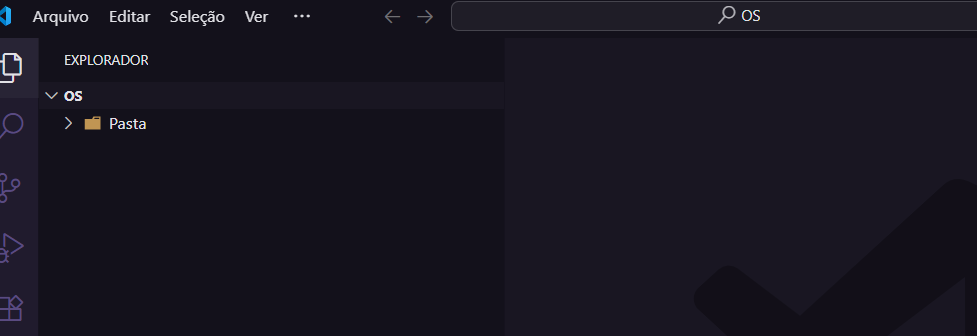


Nessa pasta vamos criar outra pasta chamada Pasta





Vamos abrir o Code nessa pasta



- vamos criar **os.py**

****

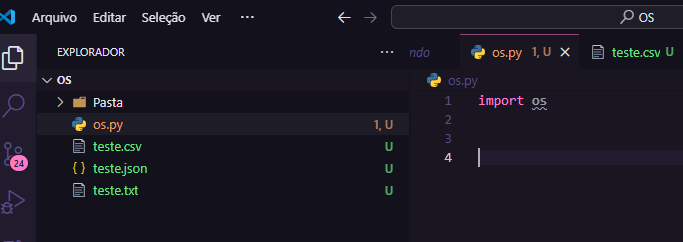
**-**vamos criar **teste.csv**

**-**vamos criar **teste.json**

**-**vamos criar **teste.txt**

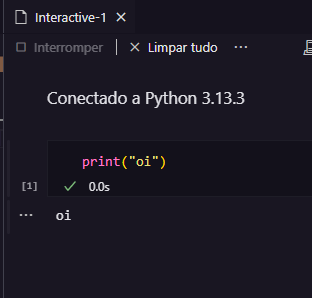


Fazendo o código

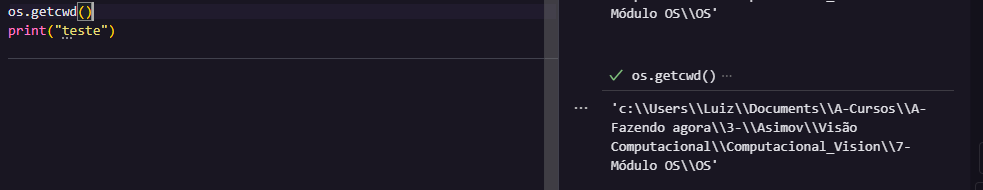


TERMinal interativo

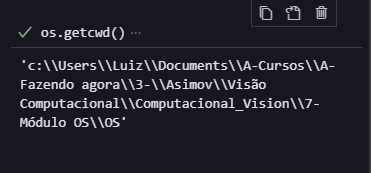
# %%- Executar Célula



Apertamos CTRL Enter e a linhas selecionada é execuatada



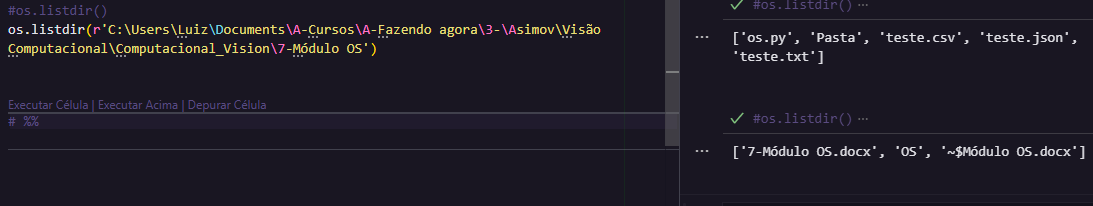
Os.getcwd()



Os.listdir()

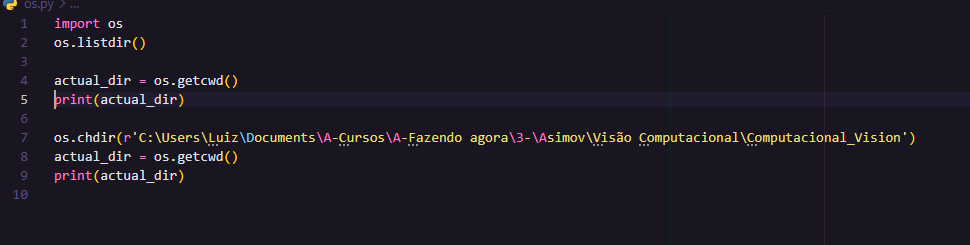


Podemos listar o u estpa em um diretório especificio



Os.chdir

# trocar o diretório



**import os**

**os.listdir()**

**actual\_dir = os.getcwd()**

**print(actual\_dir)**

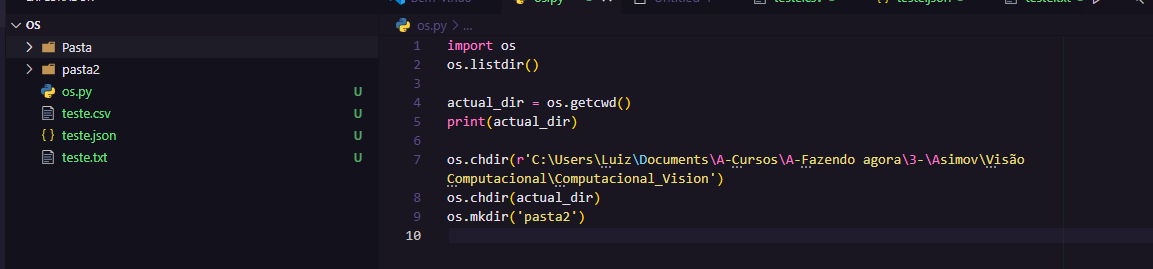
**os.chdir(r'C:\Users\Luiz\Documents\A-Cursos\A-Fazendo agora\3-\Asimov\Visão Computacional\Computacional\_Vision')**

**actual\_dir = os.getcwd()**

**print(actual\_dir)**

****

**Os.mkdir**

****

import os

os.listdir()

actual\_dir = os.getcwd()

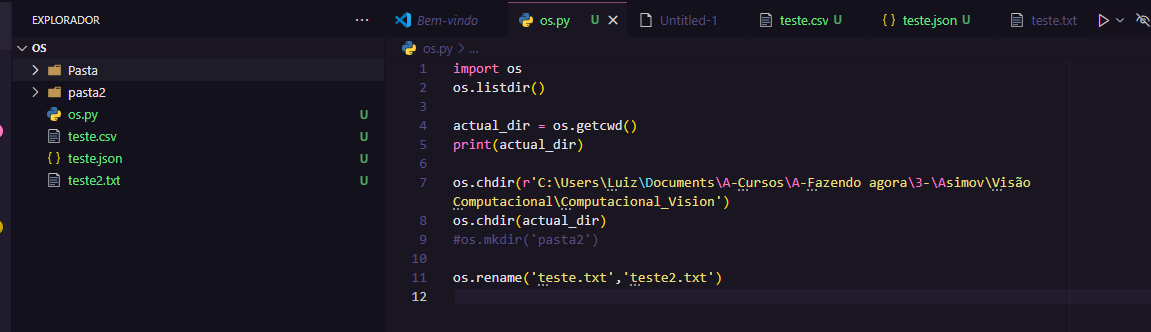
print(actual\_dir)

os.chdir(r'C:\Users\Luiz\Documents\A-Cursos\A-Fazendo agora\3-\Asimov\Visão Computacional\Computacional\_Vision')

os.chdir(actual\_dir)

os.mkdir('pasta2')

**os.rename**

****

**import os**

**os.listdir()**

**actual\_dir = os.getcwd()**

**print(actual\_dir)**

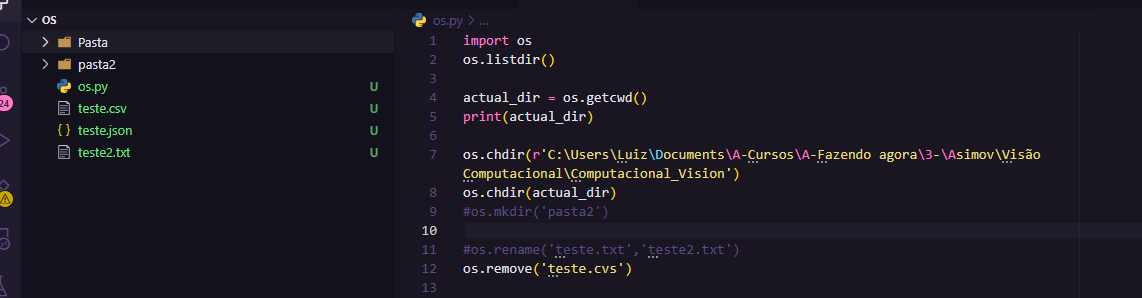
**os.chdir(r'C:\Users\Luiz\Documents\A-Cursos\A-Fazendo agora\3-\Asimov\Visão Computacional\Computacional\_Vision')**

**os.chdir(actual\_dir)**

**#os.mkdir('pasta2')**

**os.rename('teste.txt','teste2.txt')**

remove------------------



import os

os.system('cls')

os.listdir()

actual\_dir = os.getcwd()

print(actual\_dir)

os.chdir(r'C:\Users\Luiz\Documents\A-Cursos\A-Fazendo agora\3-\Asimov\Visão Computacional\Computacional\_Vision')

os.chdir(actual\_dir)

#os.mkdir('pasta2')

print(os.getcwd())

#os.rename('teste.txt','teste2.txt')

os.remove('teste.csv')



Os.rmdir

Os.system

# [Métodos do OS](https://hub.asimov.academy/curso/atividade/metodos-do-os/)

# [OS.path](https://hub.asimov.academy/curso/atividade/os-path/)

Crie o arquivo os\_path.py

import os

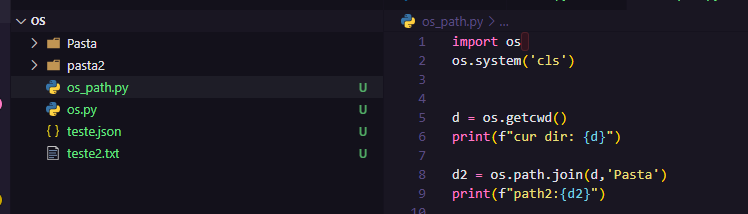
os.system('cls')

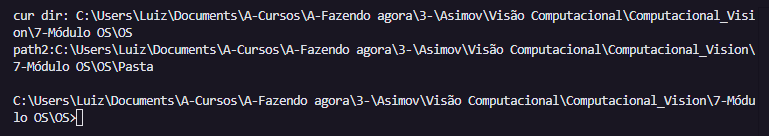
d = os.getcwd()

print(f"cur dir: {d}")

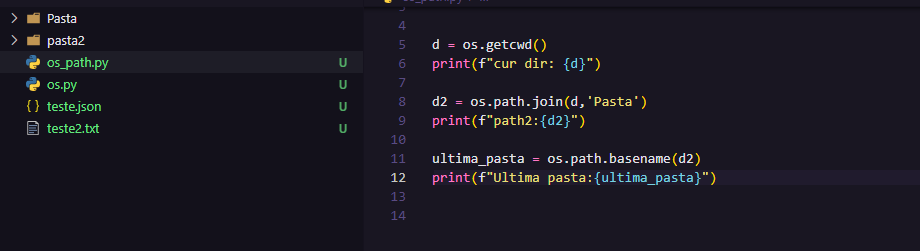
d2 = os.path.join(d,'Pasta')

print(f"path2:{d2}")





Os.path.basename -> retorna apenas a ultima pasta no caminhi passado



import os

os.system('cls')

d = os.getcwd()

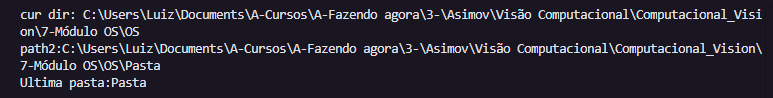
print(f"cur dir: {d}")

d2 = os.path.join(d,'Pasta')

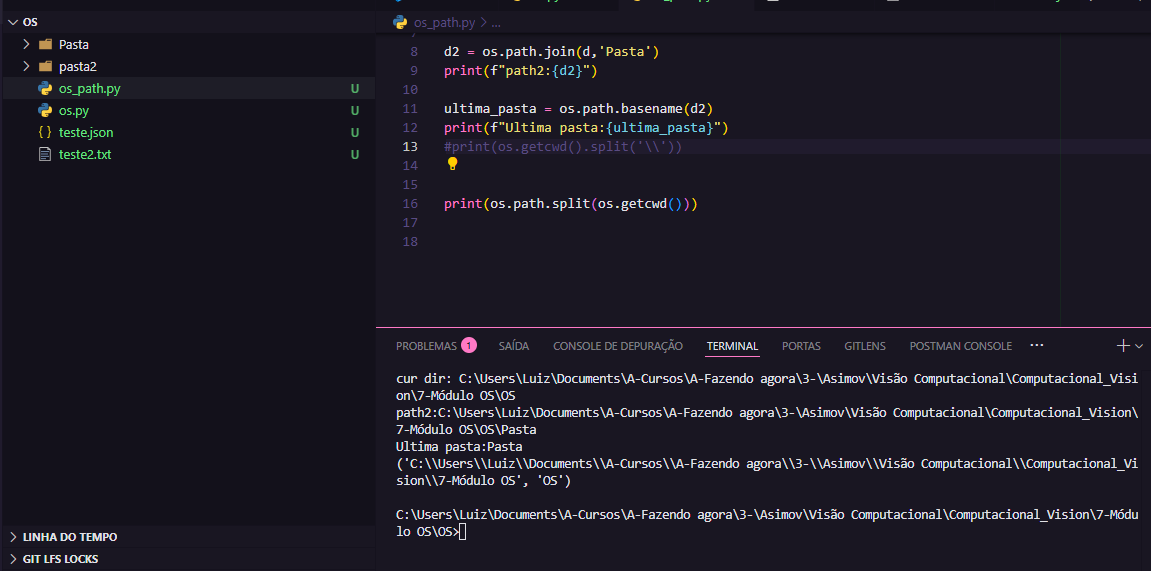
print(f"path2:{d2}")

ultima\_pasta = os.path.basename(d2)

print(f"Ultima pasta:{ultima\_pasta}")



Os.path.split -> tuple com todo caminho e ultiam pasta



**import os**

**os.system('cls')**

**d = os.getcwd()**

**print(f"cur dir: {d}")**

**d2 = os.path.join(d,'Pasta')**

**print(f"path2:{d2}")**

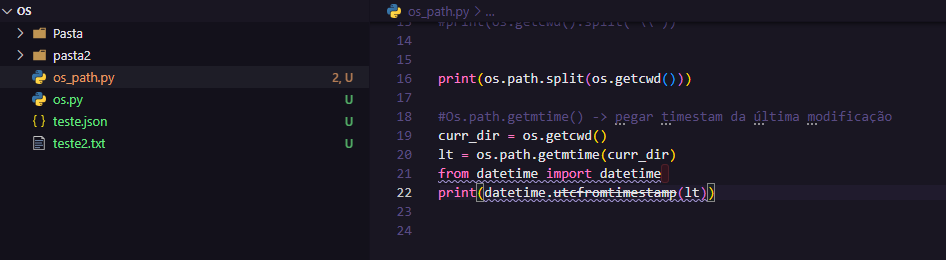
**ultima\_pasta = os.path.basename(d2)**

**print(f"Ultima pasta:{ultima\_pasta}")**

**#print(os.getcwd().split('\\'))**

**print(os.path.split(os.getcwd()))**

**Os.path.getmtime() -> pegar timestam da última modificação**

****

**import os**

**os.system('cls')**

**d = os.getcwd()**

**print(f"cur dir: {d}")**

**d2 = os.path.join(d,'Pasta')**

**print(f"path2:{d2}")**

**ultima\_pasta = os.path.basename(d2)**

**print(f"Ultima pasta:{ultima\_pasta}")**

**#print(os.getcwd().split('\\'))**

**print(os.path.split(os.getcwd()))**

**#Os.path.getmtime() -> pegar timestam da última modificação**

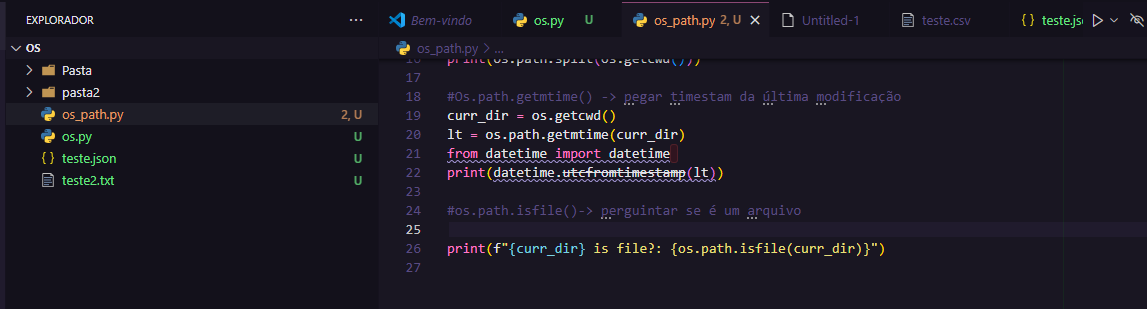
**curr\_dir = os.getcwd()**

**lt = os.path.getmtime(curr\_dir)**

**from datetime import datetime**

**print(datetime.utcfromtimestamp(lt))**

**os.path.isfile()-> perguintar se é um arquivo**

****

**import os**

**os.system('cls')**

**d = os.getcwd()**

**print(f"cur dir: {d}")**

**d2 = os.path.join(d,'Pasta')**

**print(f"path2:{d2}")**

**ultima\_pasta = os.path.basename(d2)**

**print(f"Ultima pasta:{ultima\_pasta}")**

**#print(os.getcwd().split('\\'))**

**print(os.path.split(os.getcwd()))**

**#Os.path.getmtime() -> pegar timestam da última modificação**

**curr\_dir = os.getcwd()**

**lt = os.path.getmtime(curr\_dir)**

**from datetime import datetime**

**print(datetime.utcfromtimestamp(lt))**

**#os.path.isfile()-> perguintar se é um arquivo**

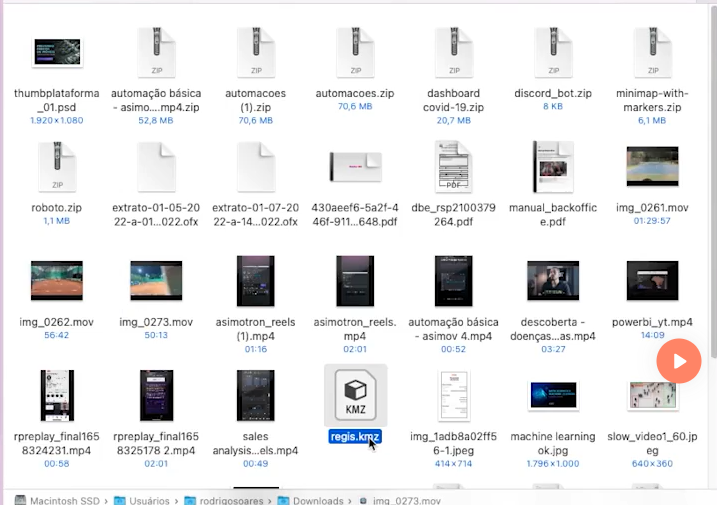
**print(f"{curr\_dir} is file?: {os.path.isfile(curr\_dir)}")**

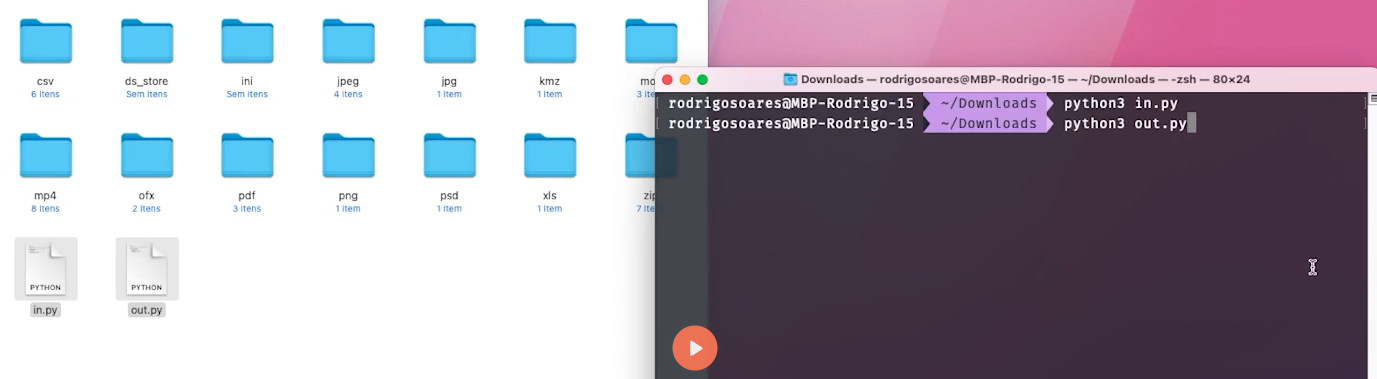
****

**Is dir**

# [Apresentação do projeto](https://hub.asimov.academy/curso/atividade/apresentacao-do-projeto-9/)

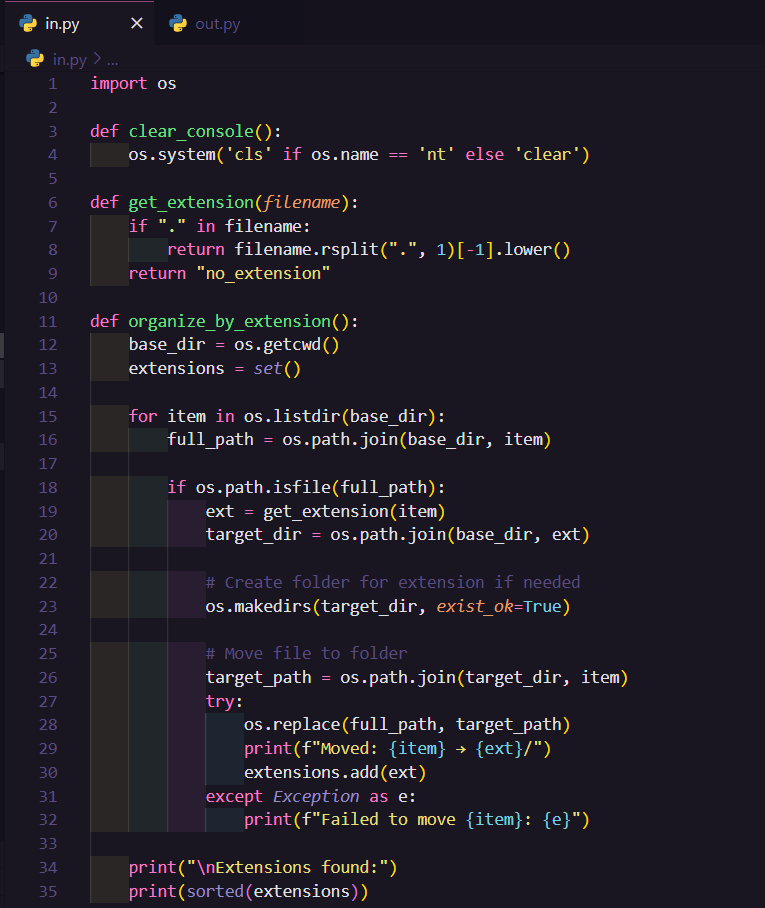
Pegar uma pasta desorganizada e dividir os arquivos por tipo

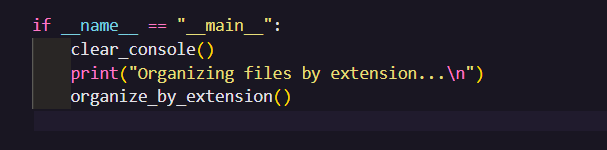




Fazer um para organizar **in.py**  e outro para voltar **out.py**

**IN**

****

****

**import os**

**def clear\_console():**

**os.system('cls' if os.name == 'nt' else 'clear')**

**def get\_extension(*filename*):**

**if "." in filename:**

**return filename.rsplit(".", 1)[-1].lower()**

**return "no\_extension"**

**def organize\_by\_extension():**

**base\_dir = os.getcwd()**

**extensions = *set*()**

**for item in os.listdir(base\_dir):**

**full\_path = os.path.join(base\_dir, item)**

**if os.path.isfile(full\_path):**

**ext = get\_extension(item)**

**target\_dir = os.path.join(base\_dir, ext)**

**# Create folder for extension if needed**

**os.makedirs(target\_dir, *exist\_ok*=True)**

**# Move file to folder**

**target\_path = os.path.join(target\_dir, item)**

**try:**

**os.replace(full\_path, target\_path)**

**print(f"Moved: {item} → {ext}/")**

**extensions.add(ext)**

**except *Exception* as e:**

**print(f"Failed to move {item}: {e}")**

**print("\nExtensions found:")**

**print(sorted(extensions))**

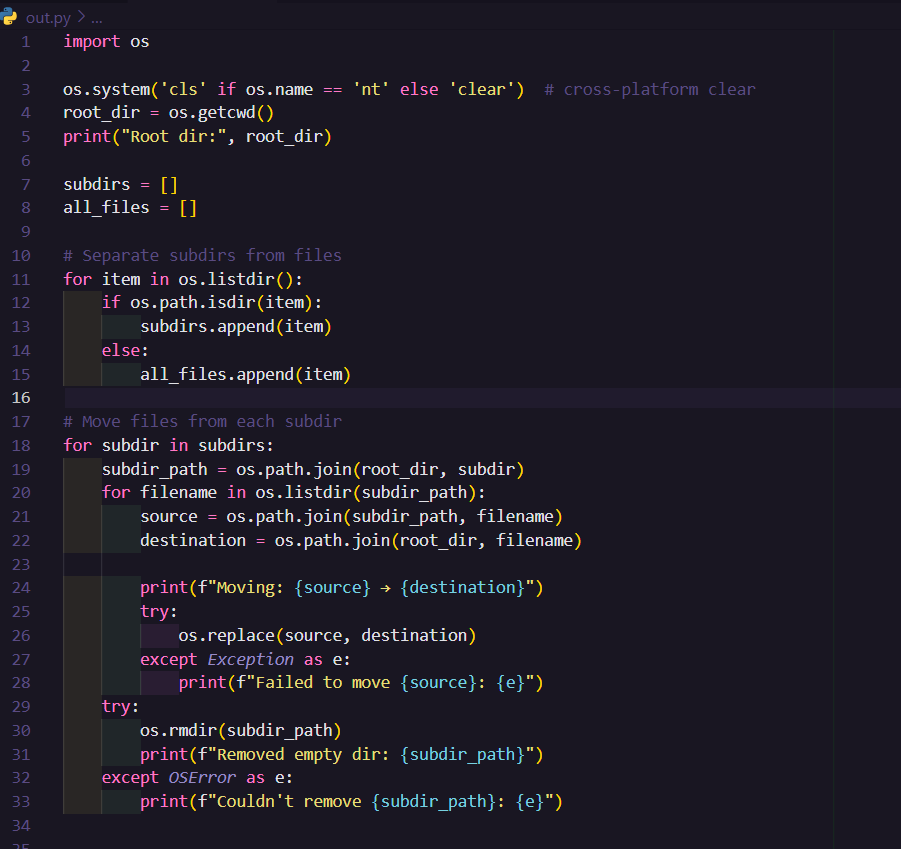
**if \_\_name\_\_ == "\_\_main\_\_":**

**clear\_console()**

**print("Organizing files by extension...\n")**

**organize\_by\_extension()**

**OUT**

****

**import os**

**os.system('cls' if os.name == 'nt' else 'clear')  # cross-platform clear**

**root\_dir = os.getcwd()**

**print("Root dir:", root\_dir)**

**subdirs = []**

**all\_files = []**

**# Separate subdirs from files**

**for item in os.listdir():**

**if os.path.isdir(item):**

**subdirs.append(item)**

**else:**

**all\_files.append(item)**

**# Move files from each subdir**

**for subdir in subdirs:**

**subdir\_path = os.path.join(root\_dir, subdir)**

**for filename in os.listdir(subdir\_path):**

**source = os.path.join(subdir\_path, filename)**

**destination = os.path.join(root\_dir, filename)**

**print(f"Moving: {source} → {destination}")**

**try:**

**os.replace(source, destination)**

**except *Exception* as e:**

**print(f"Failed to move {source}: {e}")**

**try:**

**os.rmdir(subdir\_path)**

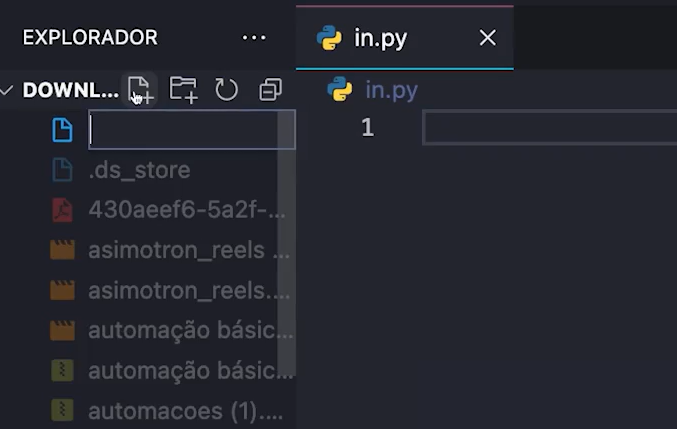
**print(f"Removed empty dir: {subdir\_path}")**

**except *OSError* as e:**

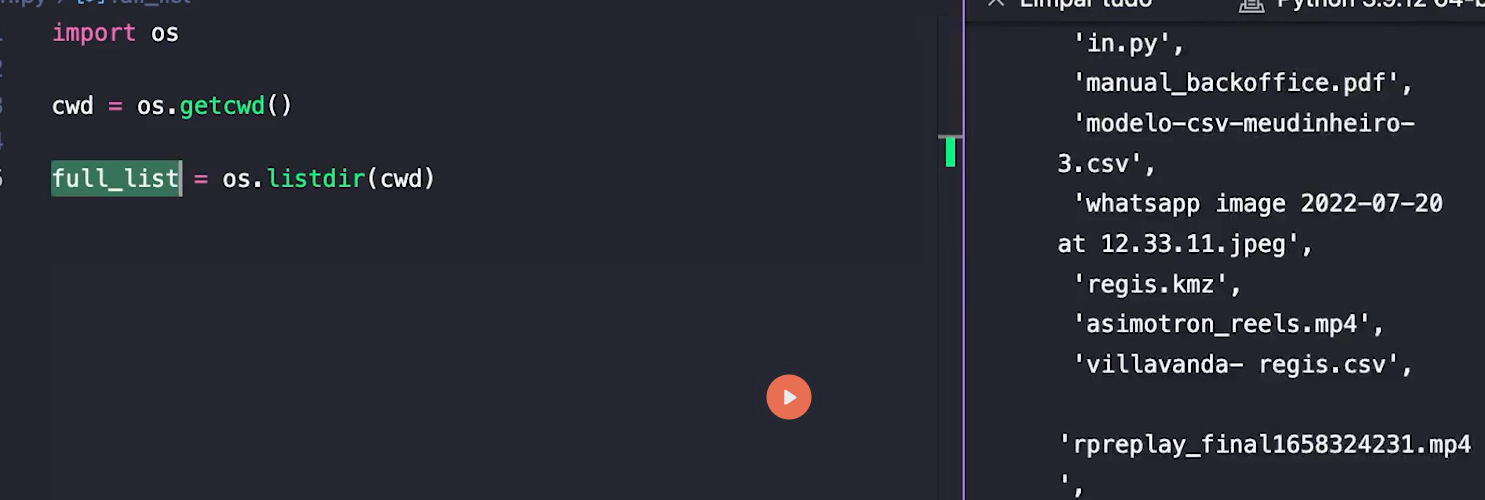
**print(f"Couldn't remove {subdir\_path}: {e}")**

# [Organizando arquivos parte 1](https://hub.asimov.academy/curso/atividade/organizando-arquivos-parte-1/)

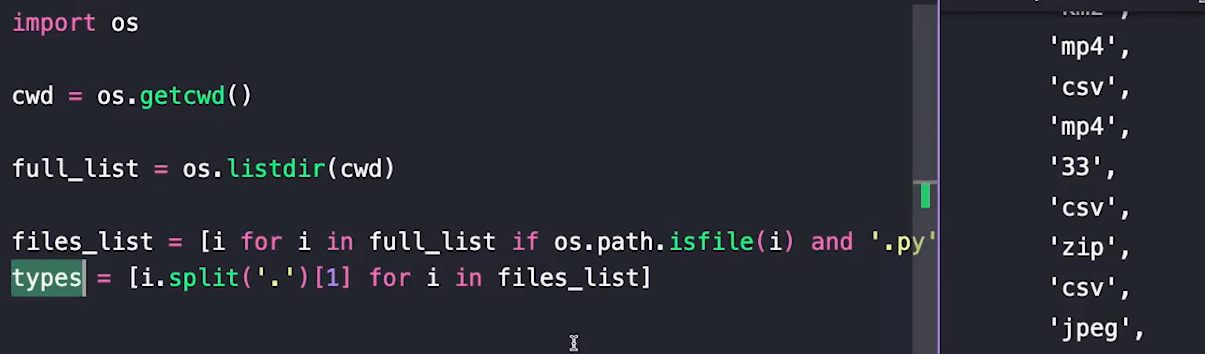
Pasta Download

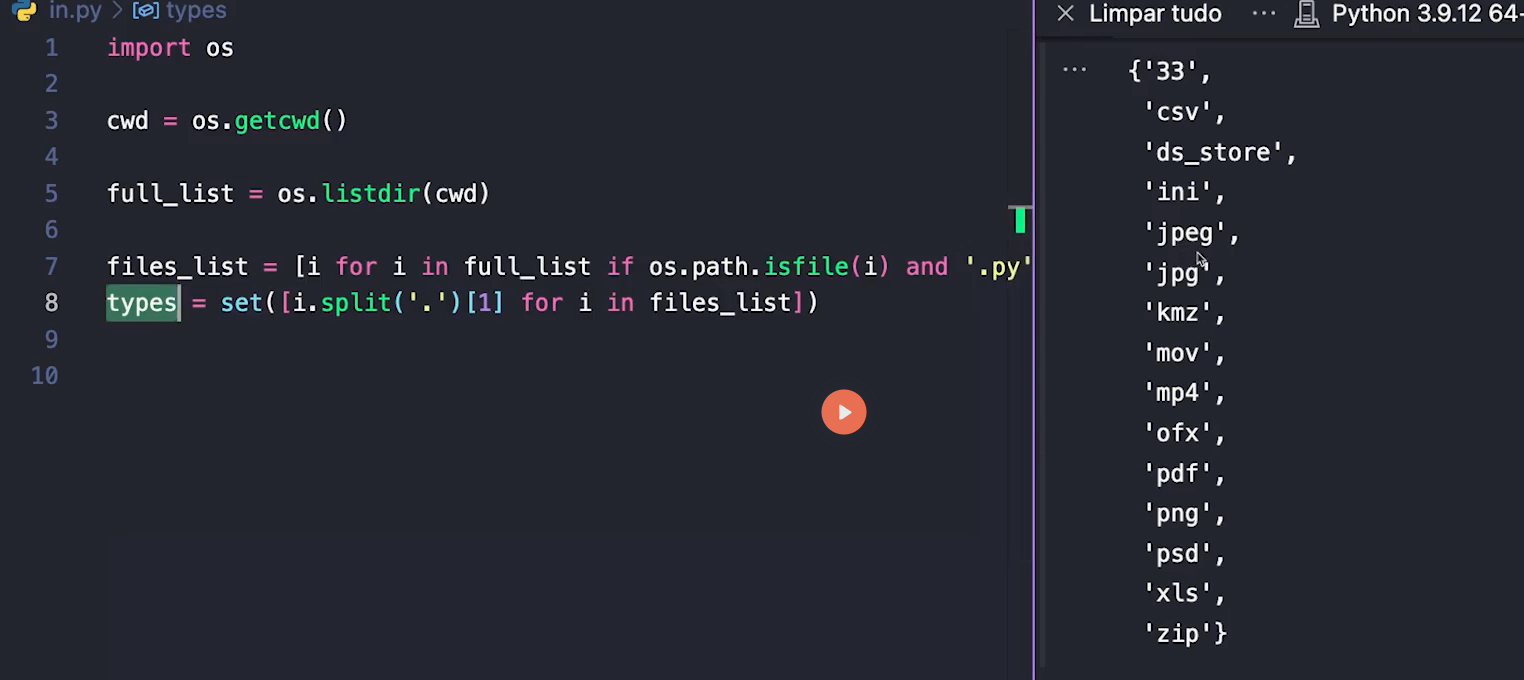


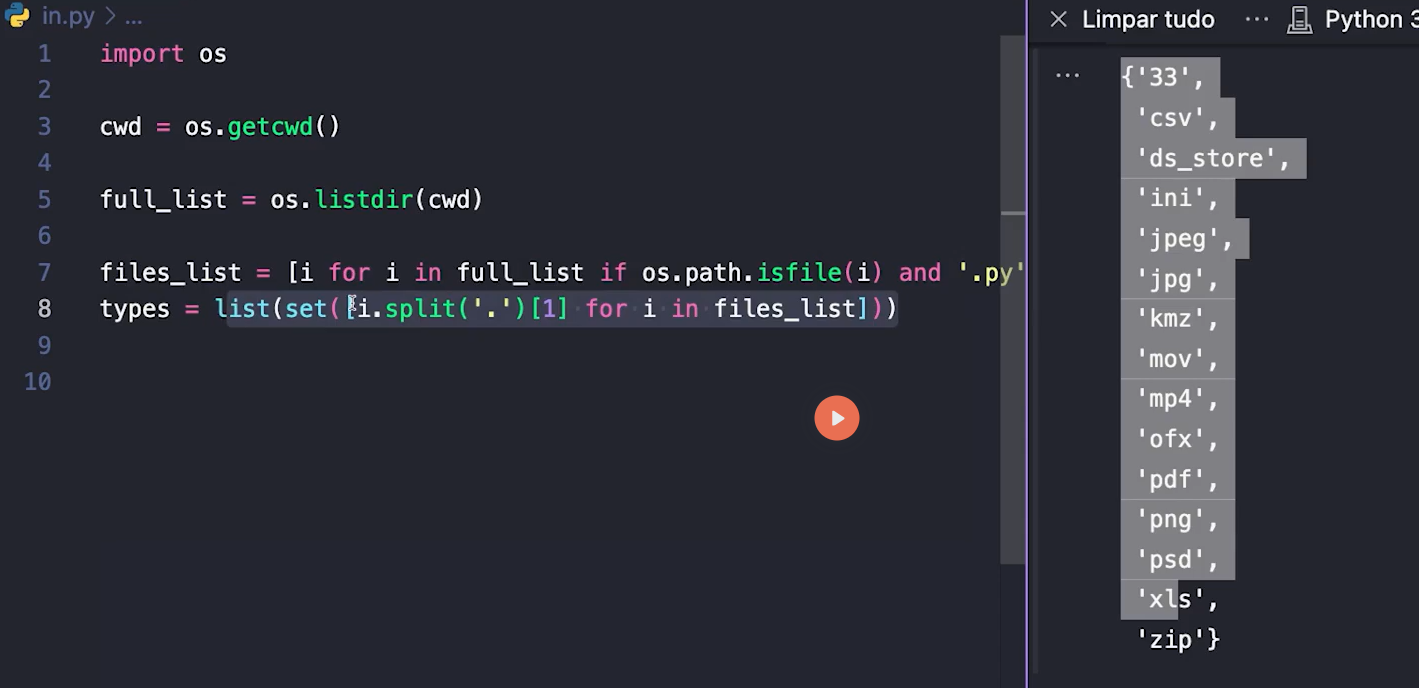


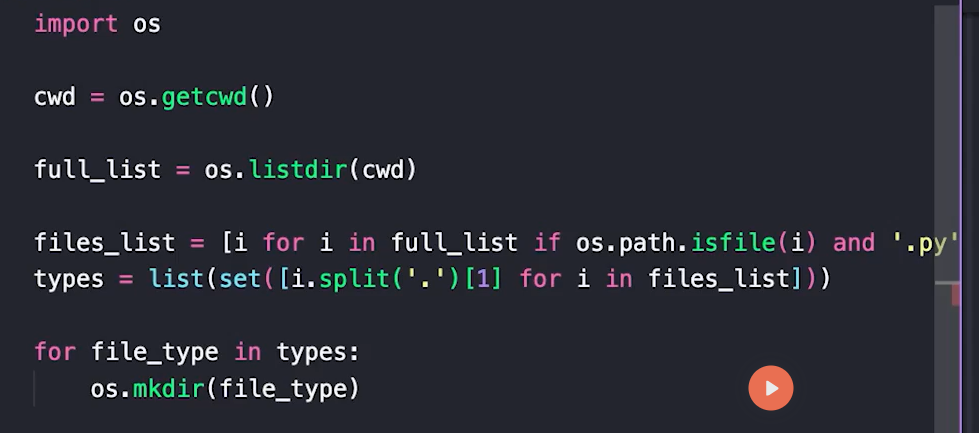


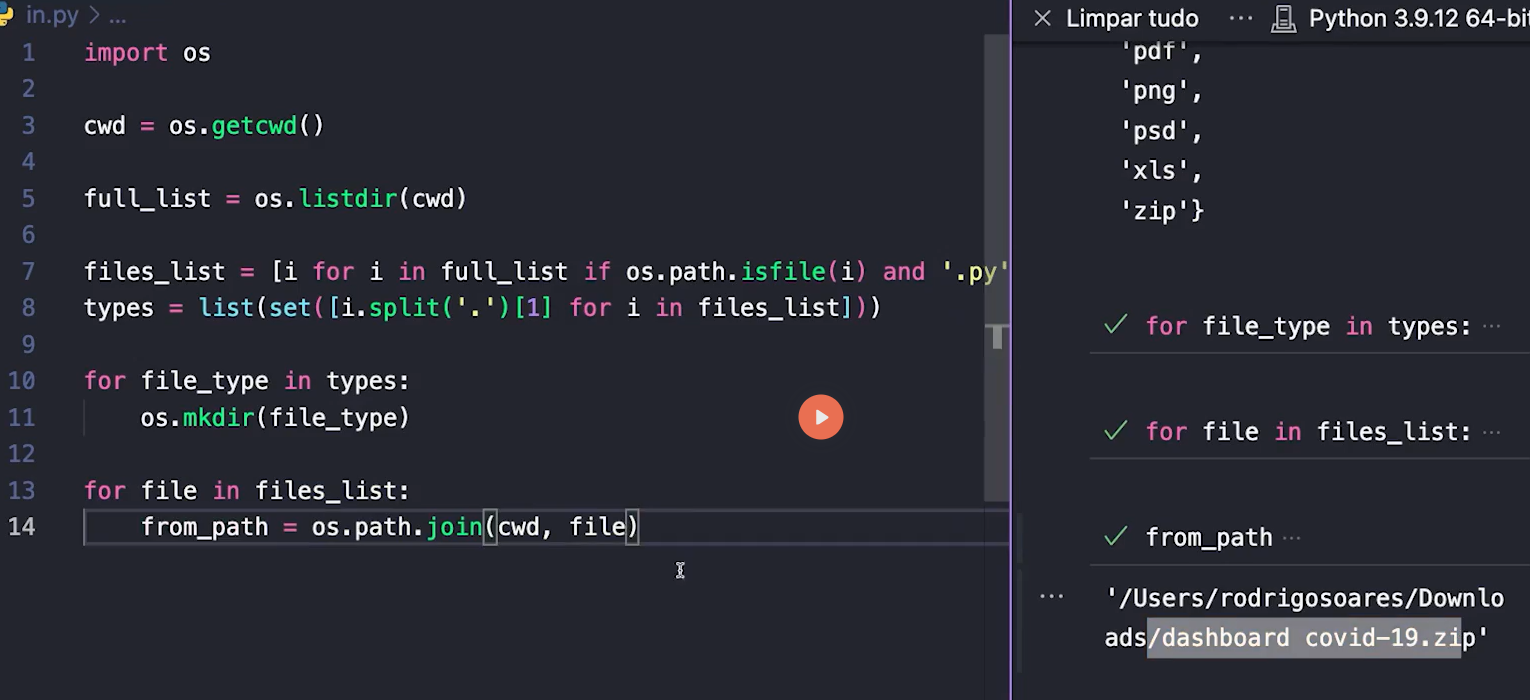


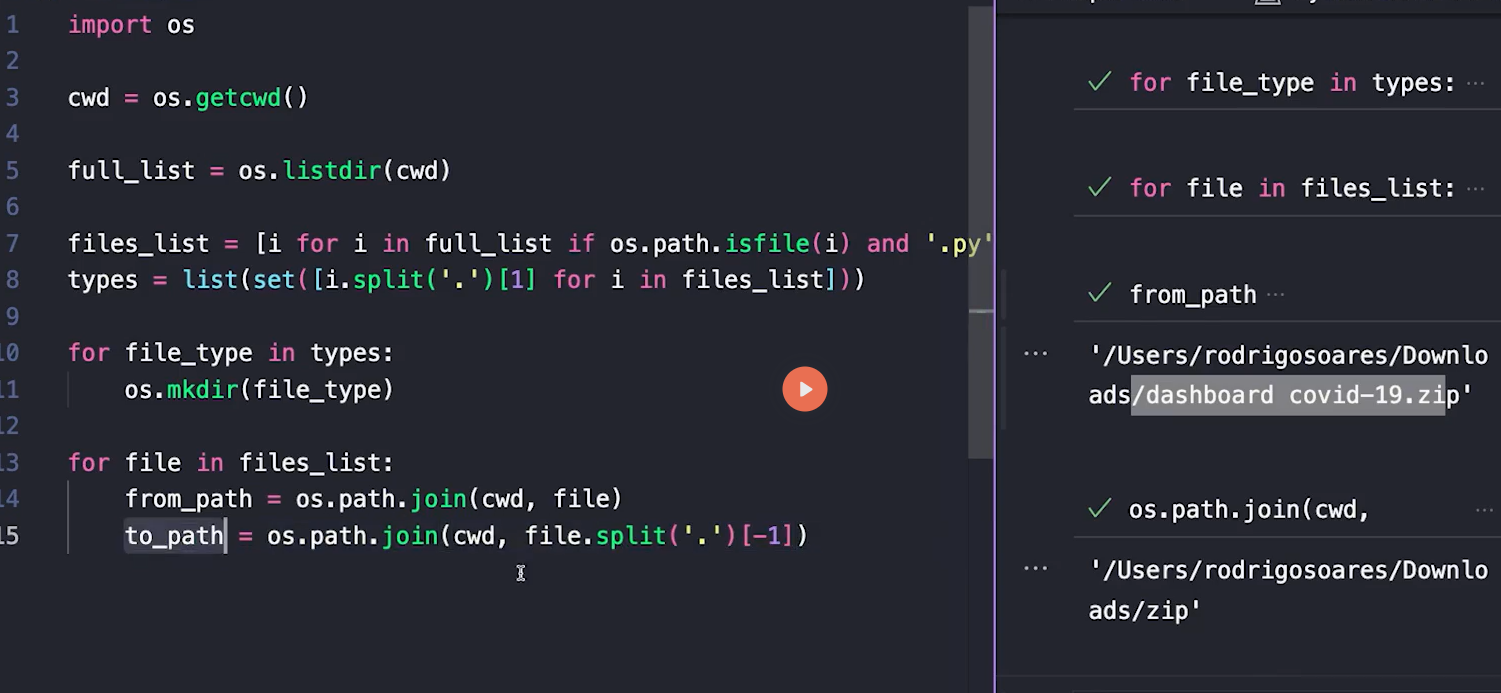


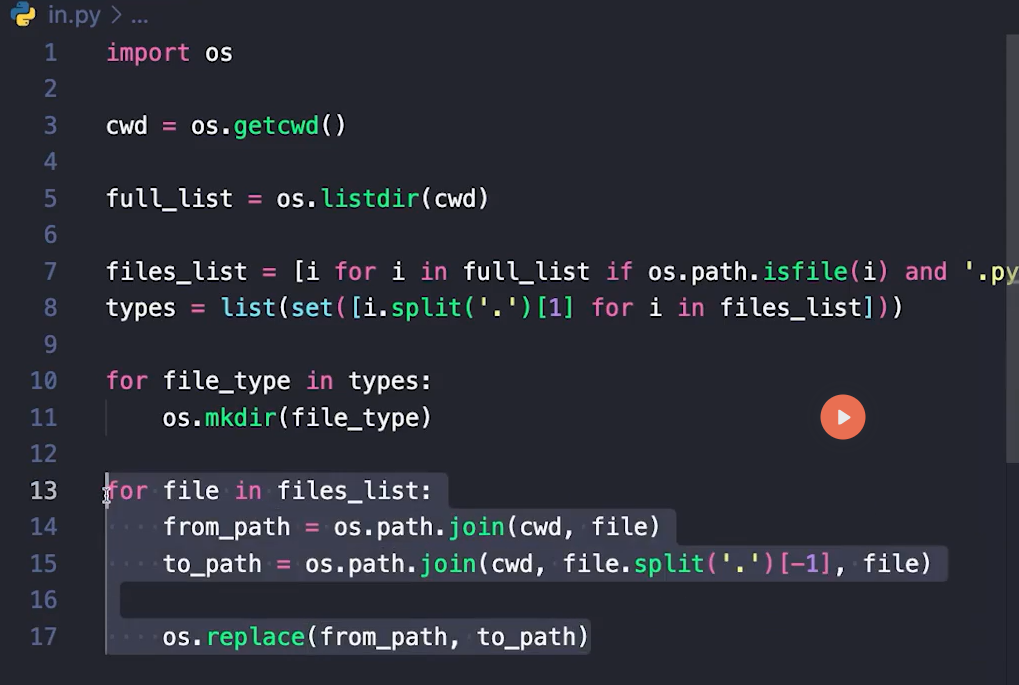












# [Organizando arquivos parte 2](https://hub.asimov.academy/curso/atividade/organizando-arquivos-parte-2/)



