#----file detection---

import os

path="C:\\Users\\Pranav\\Desktop\\python practice\\vesit.txt" #NOTE:Even if there are single back slash in original path edit it and add double where they are,also the file must exist

if os.path.exists(path):

print("the location exists")

if os.path.isfile(path):

print("It is a file")

elif os.path.isdir(path):

print("It is a directory")

else:

print("The location doesnt exist")

#----reading a file----

with open('vesit.txt') as file: #if the file is not in our project folder then write its path with double backslash wherever single there are single backslash

print(file.read()) #since we used 'with' while opening file it automatically closes the file if we dont write with then we have to close file manually

#note the above code doesn't has any exception handling which is practically incorrect

try:

with open('vesit.txt') as file: #if file is not found then it throws an exception

print(file.read())

except FileNotFoundError:

print("That file is not found")

#-----writing in file---

text="\n hello I am editing this file \n"

# with open('vesit.txt','w') as file: #'w' is written in code for writing in file but this overwrites the earlier content

# file.write(text)

with open('vesit.txt','a') as file: #'a' is written in code for appending content in file thus it doesnt overite the earlier content it appends it

file.write(text)

#---copy a file----

#copyfile() = copies conntents of file

#copy() =copyfile() + prmission mode + destination can be a directory

#copy2() = copy() + copies matadat(file's creation and modification times)

import shutil #in this module there are copyfile(),copy(),copy2() functions

shutil.copyfile('vesit.txt','copy.txt') #sorce,destination must be given as argument to function NOTE:destination file is automatically created wherever source is present

#---move a file----

import os

source="copy.txt"

destination="C:\\Users\\Pranav\\Desktop\\movedcopy.txt" #destination where the file is to be moved

try:

if os.path.exists(destination):

print("there already a file exists")

else:

os.replace(source,destination)

print(source +" i.e the file is moved")

except FileNotFoundError:

print(source + "was not found")

# NOTE:we can also do the same above process of moving file for a folder

#---delete a file--- NOTE:whenever you run these code in future for files first check they are present or deleted during the early execution

import os

import shutil

path='sample.txt'

try:

os.remove(path) #deletes a file

#os.rmdir(path) #deletes a file or empty folder

#shutil.rmtree(path) #delete files and or folders

except FileNotFoundError:

print("file was not found")

except PermissionError:

print("You do not have permission to delete the file")

except OSError:

print("You can delete that only by shutil.remove method")

else:

print(path +" was deleted")

#-----module--- a file containing python code.May contain functions,classes,etc.

# used with modular programming,which is to seperate a program into parts

import modules as msg #as msg here is just usde for giveing the the usage of module a specific name in this module

msg.hello()

msg.bye()

#the above syntax can be also written:

#from modules import hello,bye #NOTE: Then we dont have to write msg.bye() we have to write only bye() while calling the function bye

#if we are working on large program then we can use: from modules import \*

#NOTE: for knowing the inbuilt modules of python we have in our system type :- help("modules")