Python - Module 14: File Handling With Python

Python

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Video: File Modes

I'll upload some sample file.

Here I go.

In the collab here,

there is a folder symbol on the left side.

So here upload option is here.

You can upload your local files and start working with this.

First I'm uploading one comment file,

which is about the reviews.

Just look into that file comment.

And

Here there are eight lines in this spell.

Past six lines are about class related comments.

Last two lines says is not pool is not enough.

Okay, what are the things maybe that is non-class related?

Uh, the yesterday as a part of the beginning, uh,

example, I explained you about

separating only class reviews after that.

In the second example we discussed about

distributing class reviews into separate file,

non-class into separate file.

Okay, so

before directly start working with this,

what are the file you want to work with That?

First of all, you have to open the file.

When you open the file, file up that is created.

Let's say you file equal to open off.

What is the path of that file? So what is the current path?

The current folder, you need to check it. Simply say pw.

Present to working directory.

This is a line x command.

So under route content is the folder under

content, your file is copied.

Okay, I'm going to open that file.

So for your notes purpose, I copy that. Uh, text also here.

So before start working first to create a file

with this data, then start doing that.

So your file name is common dot

D and this is the data.

I'm going to open that file in file.

Equal open is the function

and give the path under

that error file is common.

Dt we have to specify opening mode.

What are different modes?

You have the right up and still other modes are there.

First we work with read.

If you don't see any opening mode by default is read mode.

Okay? Now

whenever I open the file record pointer will be on the first

line record pointer will be on first line.

Suppose I'm saying that in file dot, okay, AP juster

run it in the next cell.

I'm saying in file. Read line, singular function.

Read lines by say all lines will be read.

Now where is a record point?

A record point is on the first line.

So that only first line will be read. Just check this.

Got it. Clause is good. That is a first line.

Once the first line is read the record

pointer goes to second line.

Now current, current record pointer position is second.

Once again, if I say in file read line, it'll read

that second line clause is boring.

That is second line. One more.

Now where is the record pointer? No.

Third, whenever you open that is on the first.

After reading the first line. Record point is on second.

Now that is it. Third.

Now observe here in file.read line again.

Clause is lagging. That is third line.

Now where is the record point fourth in file

read lines this time.

Now current position is fourth, right?

Fourth onwards all the remaining rules.

Fourth onwards all the remaining rules. Just check it.

Total how many lines in the data, right? Hmm.

Eight lines in the data already.

First three lines are right.

The remaining file lines are, so

that means fourth line onwards.

All the remaining lines. I'm closing the

file in file.

Do close

file got closed.

If file is closed, once again,

if I say in file.read line, what happens?

I got that because file is already closed.

If file is closed, we cannot perform any IO operations.

IO means read and write operations. Understood.

Okay, again, to work with that file, what we need to do,

we have to open that file.

Come on, open it. Tell me the statement

in file equal two.

Open up content.

Comment do next.

Now file is open. If file is open,

where will be the record point on the first line?

Now if I say in file read lines, what happen

first and on what all the remaining data is.

Now there is a record pointer.

Where is a record pointer Now

record point is on not eight lane.

Eighth next, which is empty already. Eight lanes completed.

Now record point is on the last end of the file.

At the end of the file there is no data.

That's why if I say once again in file.read line,

what I get, I got blank

or else in file do read lines.

I got MT list.

Now there's no

data understand the point.

So this is the thing like how

to read data from a particular file.

All of you understand the difference

between read line and read lines.

Okay? Now I'm keeping all the data

into data.

Object in

file.read lines.

What is the data type of data List?

Data type is list. How many cards will be there into that?

Zero records. Why? Zero records.

The record point is on end of the file.

Record point is at end of the file, right?

That's why zero records

to start reading data from the first.

What you need to do, once again I'm closing.

If you'll reopen that the file will be closed again,

will be open automatically the path is like this

content under that file, name,

comment dot p.

Now file is red. Next onwards.

I don't want that because already my records are in debt.

Object. Understand

file got fixed.

Now check the data. What is the data type of it?

That is a list.

Check the data. You'll see it records here

At the end of each line.

Now what is there backslash

and is there the backslash and reason?

Yesterday I explained when you presenter backslash

and will be recorded, backslash and always a new line.

Understand. So look at the last for the last record,

there is no backslash.

Okay, so I want to write,

so here some comments are about class,

some comments are about infrastructure section.

I want to separate only class related comments.

Already I have read the data into data.

I'm writing a loop, but line in data

check whether this is class related comment or not.

If class in data,

not data line in the ation,

what is a line in the ation?

What is a line plus is good?

Uh, within that, within that line class.

What available or not? It is if available I want to print.

Print, okay.

You see, just for printing check only

class related comments, right?

Understand. Similarly, do one thing give its opposite.

Accept the class remaining things. I what is the change?

Not not in. Okay.

If that butler class word is not available,

then only the condition is true.

Now check this condition. AC is hot.

Cool is not enough like that. Understood.

Now what I wanted to do is I want

to write only class related comments into one file.

Whenever you want to write something into your file, first

of all you have to open that,

but I want to write right with the right mode.

I want, I need to open what

is the option for the right mode?

W Uh, let's say out file equal.

Open off the path.

I'm giving content.

Mm, let's say plus

reviews.deals.

That is my file. Okay?

W for writing next time, writing a loop for data,

for line

data for line in data.

Check whether class available in that, in that or not.

What is the statement If class

in, if available I want to write it in stock printing.

I want to write it. What is the file object

dot, right?

If I execute this, what happens just

after the right is the function

to write a record into your into your file,

but you don't see any data here, check it.

Plus review file created, but there is no data.

Where is data? Actually data is in ram.

If you close the file

that only data will be flushed from ram to disk.

Understand so that

before, once your were completed,

after completion of the far out file

dot,

now check the same class

reviews previously empty.

Now data is that only class related comments are available.

Similarly, a small extension to the table.

Once again, I'm repeating entire process.

The out file, class file

inflow file two files.

I'm taking all class related comments into one file.

Inflow related comments into other file. In both files.

I want to write that data so that two output files you have

to open, open off

content under that class.

Reviews, not list.

I want to write into this, but already

with this name already file is there what will happen?

Our rights what, right?

We have that means previous data will be lost.

First data will be written.

Do the same thing for infra

file content.

I say infra

means here also.

Now write a loop for line in right?

Tell me sir,

if the word class in

always better practice, convert each line

into lawyer

because some class might be in upper case,

some class might be in lawyer case, right?

That's why convert all the things into lawyer case first.

If class in line, definitely that is about class comment.

Then class file dot

write, write off.

Yes. If the condition falls with definitely

that is not about the class.

Hmm. Then infra file dot write.

Write off.

Hmm, your work is completed.

You have to close up both the files.

Close the first file plus file dot close.

Come on second. Infra file dot close

plus and

plus running this.

Now just check what happens.

Both are done.

Class reviews, XT

and infra reviews eht within the class reviews only.

Class comments, same thing.

Check for infra, only infra comments

Based on this idea, I give you one task.

Now you tell me I will implement.

Okay, you get this one.

How did this details

about here at each side,

how many commas each field is separated with?

Comma. The how many commas are linked?

Four means how many fields? Five fields already told you.

If there are young delimiters, young plus one fields

sir and getting my voice, you are not audible to me.

Someone please speak. Say

We can hear you sir. Yes.

Yes. You are audible sir. Okay. Correct.

So there are five fields that two,

the structure is like this.

Id name salary, gender, and department number.

Probably five years. Sir, if you look into the gender,

there are two genders, males, females.

I want to separate this data as males

and females, all males into one file.

All females into other one. This is a small task.

First I keep this into text.

Uploading e mp one dot text.

Done

file is MP one.

This is the data.

My task is like this.

They should put all males into males xt

females into females.

First I need to read the

employee EMP file.

Mm, open up path.

EMP one pt. I'm not giving any opening mode.

Read.

Go on, read data from it.

That it P file.

Do

read again.

The next one. What? I don't want e emp file dot because,

because the reading is already complete,

I want to write it into two separate files.

Males and females.

Open content.

That's a males dot based

write two.

Same thing for females

content males do.

Yes, right?

Start trading data from this.

Check each record whether it is a male or female.

If male write to males file.

Otherwise females file tell you

Line in what is sample

row 1, 0 1.

Gender

to check whether it is a male or female.

If, can I say him in

for example, this is fu name is Amal.

If I check like this, ya available in or not

The letter ya available in or not?

Yes. And then what?

Uh, what it reads as a male,

but in fact she's a female, right?

You should not check like this.

How to split it first.

W is equal, equal to line dot strip.

What strip is doing. Mm-hmm.

Of course in this we are concentrating only on

the agenda Don of strip.

Because if backslash N is there, that will be

for the department number, right?

Hmm. Okay. Lawyer. Why lawyer?

Some genders might be in upper,

some genders might be in lawyer base.

That's why.lawyer do

split spliting based Done how many commas?

Four commas means how many elements in the list? Five.

Five elements in that file. Last second one is gender.

Separate that gender W off

minus gender separated.

Now check this. If G equals to Y

understood If G equals to Y means suppose this is the record

that is separated condition to

or false G value actually or false.

False. Then Y spot will

suppose if the given condition true, true that is male, then

males dot right write off.

Right? Yes.

Males, sorry.

Females dot right of the,

once every work is completed, males are closed.

Hand slot object. Check this,

check the data.

What records are here? Males file. Females file.

Look into the males. Only males are here.

Five males. These other

males look at females.

These are females, okay? Have distributed them.

Video: Joining of Files

Which is DE pt

within this 11, 12 30 in 2021, my employees,

we are considering on 11, 12 30.

Okay, this is the data.

So these two files, I'm uploading

first for practice purpose.

Let me keep this data into our notes.

Around 90 are following. The past file is profile tx.

This is the data for first line is header input file two.

What is that? Input file two, dpt, tx.

But here, no header. What are the fields here?

Id the department number, department name, location

manager id.

So here no head.

The schema is like this.

Department number, department name, location manager.

Right? Sorry.

The second file data will copy.

Task, join two files

based on department number call

the expected output skill.

I last name self gender,

department number, department location.

So in a single file I want to write a complete information,

previously information available in two separate files.

Now I want in single file,

I just Ed to open the file.

Let's say e file,

open off.

And our collab, our path is content

from that content file.

Yes, it's in the reading.

Same style department file

content or

in the first file there is a header

in second or header.

I want to separate that. Uh, header E had equal

E filed on read line.

Our record point is on second E data Equal

EFI read lines only the data part will be read

next in the file.

There is no data. That's why D data equal.

There is no header here.

Defi read lines next onwards.

I don't want those input files straight away. Can close.

Now check the data. What happens

will upload those two files

silent.

What are the first five profiles?

So these are the topics. Check that data.

Feed data

only employee spot separated D data.

The departmental information separated.

And what is the joining column for department number

in which that is unique in the D data.

So first I need to keep this into textile

dvo equal to dictionary

and start working with the D data.

For DD data.

First I'm spreading the information.

D nvo equal D

split

apply.

I get what list? First one is department number

I to now check what happens from each line only department

number will be separated

to print.

DM only,

department number separated do not.

But I need remaining information also.

That's why W equal to

strict lawyer split.

This is always better practice.

Now W is the list what fields you have in the list.

Dm O being location manager, right?

These are the fields that ITing the DO,

Zeroing the department information,

remaining information.

Let's say info equaled

W one quota.

All the remaining information is into D.

So this department number I make, I, I will make it

as a key info as well.

D info of D equals.

Now check this. Well,

okay, 11.

Marketing, 11 as P and that it's details says value.

Similarly. 12. 12 details. 13. 13 details.

How many departments we have for all the departments you get

Now in which file, the department number is duplicated.

That is employee understood.

I'm going to read the data from employer already have read

the data into e data.

I'm going to start reading the data

for lining E data here.

What is the schema?

This is the schema. So here

I want this information.

I want this department number information.

But in the department number in the last

backslash is upgrade.

I don't want that because I want to con coordinate.

That's why W is equal.

Now totally five fields are here. Post five fields.

I'm treating as info.

Okay, just keep the WSW lettering,

the department number W.

So for the first regard, department number values is level.

I want to get level information.

I will pass to the previous that

said DEPT, info

dvo involved

department, complete employee details.

R in W department. Information available in this.

This one here. What fields are available?

Five fields are available here. What fields are available?

Three fields. Department name, location manager. Right?

These three things are available.

I'm going to con coordinate them.

Info equal to w plus DEPT info.

DE PT info here. How many fields? Five fields here.

Three fields total.

Eight fields, but all fields are now string only.

I want to join them as a single link up to now.

Just check what happens. Print info check the red.

Complete information is available in single phase

or not previously.

That is into two separate files.

Now everything is into single.

The complete information

of each ly is available in a single drawer.

Now comment. Anusha one. Anusha one. Like 10,000 female.

Paul following hr, working at Delhi, his manager.

Yeah, of course information might be available

in other file.

Understand the point. Now I want

to write this information to the file.

That's why we has to, before writing the data into the file,

first we need to convert into string line.

Already in our last two sessions we have seen how to con

outline equal to dot join.

Join off in At the end of the line, I need

back, because of writing one line,

it has to come to the next line.

That's why backslash. In the last, just

before writing, confirm the output print

outline previously listed.

Now it is a string line or not. Each line is a string line.

Understood. Now I can start away.

Write this information to the file.

Instead of printing, I will write it.

Output file out. File equal to

under that given an name

E-M-P-B-B.

Because both files you are joining combined.

I want to write, I need a header.

I need a header equal to

id name, salary, gender, department number,

department name, location manager.

Right after that, back

before uh, loop.

I will write this letter into the file

out file dot required.

Write off it

now within the loop instead of printing,

I'm writing the same outline.

In the outline. I'll say in the last backslash.

Is that

out?

Understand Then

after accomplish of your work, you have

to close the file out.

File dot close.

Let's do this Implementation

here in a fresh cell.

I do it. Data is written.

Just confirm this. What is the file name You have E-M-P-D-P.

Complete information available single file account.

Okay, previously in two files.

Now one file.

Next, developers directly will use this. Understood.