Python - Module 11: Functions in Python

Python

Module 11: Functions in Python

Video: Functions Introduction

Discussed about the three types of collections.
One is list capital and DC.
One more thing that is set.
What is this collection now?
Unique. The basic won't allow duplicates. Okay.
Only unique portal. It will be taken.
So for this symbol, same as D,
but in the dictionary, key value base will be there.
Here only direct value. For example, I'm saying yes.
Whereas per set, that's a
total six values are here, but how many unique values?
10, 20, 30, that's it.
10 repeated for multiple times and 31 time.
20 multiple times,
but it takes only one time, just this.
So 10, 20, 30, even though it passed duplicate values,
it would similar to that.
I'm taking a list of my employees
that the department numbers I'm taking.
So first, second, third employees are from
11, 12, 13 departments.
Next employee from 13.
Next from 12, next from 11, next from 11, 11, 12.
Now DNO is a list.
How many elements in the DNO, which is department number?

There are nine elements.
How many unique department we have Three. Three.
I want to find all that.
So DNO is a list just to convert this into set,
to convert a list to set.
Set is a function set up.
I got only 11, 12 30. So duplicates eliminated.
But your question is how many departments
that we have set of?
Yeah,
I have three unique departments in the organization
but similarly.
One more info is a list.
Each element is the top.
So table has its own.
What is the meaning of first one?
Id second is name, thought, gender.
Fourth one is city location.
So that is first employee
second,
the third employee.
The last, last word. What?
The last second I'm giving.
So what is the type of info? High level, that is a list.
Each element is what I'm taking first element
and testing the data type.
That is topic.
So finally it is a list of topics.
Now my question, your implies are from
how many unique cities,
how many unique cities?
Three. Three. What are those?
Yes, I want programmatically that reply.
So I'm asking what unique cities first

to separate only cities, first to separate only city.
Let's say cities. It,
I already know this.
Transformation expression I follow
we in list.
The list is, so each element is coming to VV is a apple
in the place of expression.
I'm giving minus
because C post is is last one.
Now look those cities
only city spot now apply set for it.
Unique will get
Delhi and pool that if you look into this data,
data is in a sending order.
Faster. Delhi. Next, next pool.
But supply lab.
So by seeing this output I can
understand from three different cities.
Got it. Same style. You tell me answer.
How many genders are there in our organization?
Programmatically please.
I'm asking about gender first to separate that gender,
let's say gender people left side
expression par bar V.
So V is the in the January 3rd one, index number
or minus two also you can say, but
because that is the last second, now look into this.
Genders
Duplicates
have two in.
Got it.
Okay, So list
technically what it is called.
Technical, not functional

is beautiful.
Be Object,
face operations allowed read
and double
opposite is immutable.
Object. The pace it allows
only, right?
Remaining operation is not possible.
Dictionary immutable or immutable is mutable.
What about set? Just a try. We did not try it.
Let me keep one side here. A hundred, 203.
Oh I'm saying yes, sub zero.
Whatever I
did not get it is not allowing you index number.
If index number is not allowed. Can you update that? No.
That basically is not allowing, even reading us
reading a particular development is not allowing understand.
So whenever you want to update what is a technique?
Indirect ways convert that into list.
Do your operations secondary convert thele. Set.
Understand. So this example we did for
couple, okay, one example.
Let's say SL is equal list of S.
Now look into this sl where list
now we can update, but this time there is no guarantee.
Hundred will be into the same beginning position.
What are the element you want to upgrade
to that application?
Said
that is already one.
I'm making it a thousand.
Okay, now we can order that into set.
Set up. Yes.
Now look into this. Yes, into

you'll see modified hand.
Got it. Now QU is 200, 300,000. Got it.
Uh, but that's a small question here.
So in the third line, can we use append?
Uh, here like S one SL append,
Yes, cell can use, but yes.
And what happens yesterday?
Because assist said I'm giving 2000.
Look into this, yes,
but accept.
Understood. So if you want to append any value
to your asset, same process.
First convert that into please list
append. Got it?
Yeah. In the list only only can we uh use a
append keyword, right?
Yes we Can. Yeah. Okay. Okay. Yeah. Thank you. Yeah,
Please list. We
can append it because that is understand
or not
list is a, that means we can perform Loop on that.
What about trouble? Double is a
what about dictionary?
Dictionary also et. Okay.
Lateral will come back to the sector.
Let's take a sample dictionary. That's a D.
Default dictionary.
Thousand value 2000
CCK 5,000.
I'm saying
again 6,000.
How many pairs will be there in today? No three pair.
'cause we have a rule key should be unique.
Value can be duplicated.

First time yay hundred pay 8,000 pair will be
created after that.
B 2000, C 5,000 after that. Yay. 6,000.
That updates past year.
So finally what will be there into this one? Check it.
I'll get only what if
while it can be any data time.
Understand. Okay. No, totally. How many page are here?
Three page dictionary is
or not Just confirm it
for KD 20 K.
So at each iteration it is taking only key part.
The first ation, what does taken? Yeah, second iteration.
B ation C understand,
but along with each one I want that value.
For hk I want value text name is what? D. D of K.
If I pass key, I will get value.
Understand, I'll check it.
D 6,003, 2000 C 5,000. Understood all of you.
That is what is your comment? DIC is A or not. That is it.
What about sector it or not?
Let's come this.
Look into this.
Yes. Yes. This sector, we have three values.
So index number, it is not allowing reading,
it is not allowing for I'm writing a loop
for VS print.
Yes.
What happened
is covered.
Why? Just guess what is happening.
Yeah. C set. Set has only three elements.
Actually what we are expecting in the ation
ation 200, we are expecting second iteration 300,000 we are

expecting but it is reding.
What entire set is reding
Because of three elements.
Three times entire es. Right? Got it.
Because index number support is not there.
Generally what happens if your C list to
what happens in the fast ation?
Yes. Sub zero will be upright in the second iteration. Yes.
Sub one will be up, right? Ation has soft two.
But here, index number sub not allowed. Right?
Entire ES up right here. Got it.
So that is the reason. So that means like uh,
what you can say here about the list, not interval.
Got it. That means each element is not a trouble here
but at any cost I want that each element then
understood into list
and perform your operations.
Got it.
Okay.
Now let's look into the transformations.
Transformations means
and a collection.
So in Python, technology transformation means is this one.
You want to do some operational each event
that is called transformation.
Already know Python, exclusive style,
like a left side expression, right side of faster.
We see all the transformations with the traditional way
and then the Python exclusive style.
I'm keeping some values
I see running.
Okay, 60, 9,000.
Okay, total 10 values that we have.
Now the task is for each element I want

to add a hundred different waste.
We will see way one,
I'm saying something why?
Which is a new list. Which is a new
list which is empty.
No elements into that. I'm gonna run a look through the X
for VX what I wanted to do hundred
for each, I want to add hundred.
It's not for the X, it's for the v.
V plus equals to hundred.
So in the first, what is the value of V 10?
Four 10. If hundred is added. 1 10, 1 10. This one 10.
I'm going to upend to Y.
Let's call now check the values of both X and Y.
X. Print one.
We did not run the first cell.
Now look at the same.
It start adding Y you have to upend B
because the expression, the result again restart.
I viewer. Okay, now just
so top second row is transformative for each element.
Hundred days. Got it.
Uh, this is a traditional programming stack
in any programming language.
This is a technique we follow first entry list
after that far loop within the far loop we perform
over transformation.
I mean you, you'll apply your expression.
The result you are appending to the MT list. Got it.
It's a traditional style, uh, python style.
Mm expression partner.
What is the expression? What is the for loop for V in
X for V Next.
So each one is coming into V.

Check the Y, same
clear.
Uh, similarly
and taking our names.
Six names are that two. The names are like this.
Some letters are mixed and cases
where this is a story name is having five elements.
First letter cannot into
auster into lower.
So for this manually we try something. Suppose que
if blank space.
I will because foster IES is a space
to cut off that I'm applying strict S equal to.
Yes, broad, strict. Now just say a sub zero.
Zero is fast. Next out spaces are cut off.
The first one is yes,
but a subzero, I'm saying upper.
Let keep this entire expression into C.
Where for first character,
next remaining
characters, one call.
I'm not giving. Second index, end index, what will happen?
Second element onwards. Secondary character onwards.
All characters will be taken. Check,
hand check.
But that is capital I'm converting the center thing into.
Now why upper case That is into ffc
Charact lower case that is into rc.
I want to concor these two things.
The RC plus FFC plus RC
string plus string is what sir?
String Concor. Now check.
So here I have done this only for one element.
I want to, I want to do this for each and every of the list.

Faster traditional way,
faster traditional
way, empty list faster.
That's a new name equals to
and blue.
Cut out the spaces and do
street,
not street.
Next.
Hmm enough.
Zero. I zero.
Generate a statement. Two. Separate then how I just said
I read it in upper case.
Uh, how to take the first character enough.
Zero. Got it. Now first Charact is separated.
What is the expression for last character remaining.
All characters. Yeah.
Now one polar, not
this thing I'm keeping under
RRC For remaining characters.
Now finally I'm going to append
you have C plus RC into new name, new name
do append, you have C plus R.
It's new now.
New name
STR.
It has no attribute called upper one P. Extra time,
same thing.
So for names, faster spaces cut off,
then fast cannot into lower case remaining all characters
lower case upper remaining into of course
for this you have predefined functional.
So later we will see predefined function.
Try to implement the loss. Got it.

The traditional way I want
this is traditional way Python style.
Understand Ah me.
Let's say for new name
expression for
what is the expression you'll give
zero pardon
Plus enough dot.
Do we get it? Do we get the reply?
Can I say one color? Yes. Is it enough?
Do
Yes.
Got it Again here and do
understood
anything I can read your mind.
What is there in your mind? Why double times to pipeline?
Yes. Think it are storing anywhere
that we result.
No. Understood.
That's why second time I'll say and step up line. Got it.
Uh, come on, you tell me
same thing happened or
suppose I did not say step for the second,
second expression.
What happened?
Okay, what about the money?
What about DU only space cut off,
taken only for first expression.
Understand, but the second prior expression
that is not applied for second expression also have to apply
strip
Independently.
These are the four expressions you have here.
All these four expressions you have

applied into this expression.
Think that here in my logic there there are a hundred
expressions in my logic there are
a hundred express forming a hundred expressions
as a single expression is very tougher.
Definitely do some mistakes in
that case we follow our special technique.
I will create my own
function, okay?
I will create my own function.
I will call that function too. The expression place.
But how to create a function in python that is a key word.
Depth
that says some sample function
for testing that up.
Twos
some Yes speak.
I want to written that. Yes.
Well this is a style of creating a function in Python.
So after now the function part is ready, I want to test
that function, calling that function add off
hundred comm 200.
What is this? Hundred goes to.
Yeah, 200 goes to.
So mapping first one to first one second one to second
that the different also you can do
by specifying the parameter map those operations lateral
here I'm executing that function.
Got it. So on the same function style, I want
to download this function to convert first letter into upper
remaining letters into lawyer.
Okay, for this I want to develop a punch.
Let's say my function name first
input is yes, it is strict,

strictly spaces are not.
It doesn't matter. First cut off, then quel
do everything.
You are connoting into case.
Okay, next first character.
Yes, all zero. I want it as upper.
Next remain characters. Yes, all one column.
That means second. And what all remain characters?
No. Already in the beginning the thing is already employed.
Understood. Now new name equal
have c conation
have I'm going return.
Understand Now just test this function.
Stop one. Oh yes.
In the place of S I'm saying hell,
what expected should, should be cut off
after that H should be capital remaining off.
Got. Now if you look into this one, multiple expressions,
but if you look into this side, this one, that is it.
Single expression. Now look into your name.
There are finance names.
I want to convert each name into
passport and remaining lawyer.
Come on directly. Python style.
Each name is coming into Y
and I'm calling with the first upper off.
Now check hidden value.
We got it. So this technique
we'll use whenever we want
to apply multiple expressions in a expression place,
keep the mini of function
and call that function the expression.
Please clear. Hmm.
Based on this one more example.

It's LAC 20,000, 10,000
80, 90, 72
lacks.
Sorry, two lack totally. How many?
One more. Okay,
total seven value.
Sorry, I want
to classify each ly based on the salary.
I want to classify each employee into grades.
My requirement above grade equal two, one,
lack salary grade year 75
to one like grade B, 50 to 75.
Grade C. Less than 50,000.
Less than 50,000 grade D. What about this?
What is the grade of him? Yeah, grade.
D. Grade less than 50 T.
Grade less than 50 B. He is B grade 75.
Two. I'm like B
grade seven days.
C grade two, LA B grade.
And why I want to perform conditional
question.
Four minutes one team, did you understand this
greater than or equals to
help me Faster, traditional way
less faster, traditional way.
Uh, our learning of yesterday and day before yesterday.
Yesterday means last
and last class yesterday and dictionary.
Now today, na defend is far loop.
Understand to perform this transformation
faster, traditional way.
What is traditional way? First empty list.
That's a great equal to

empty list then far Loop.
Yes. Total is seven elements.
Seven iterations. My requirement is what?
Greater than or equals to
how many grades I want to classify four grades.
A, B, C, D.
Last one is DI make it as default. Okay?
G, R, D equal to oh, target. Yeah. Grade.
What is the condition for this?
If yes, greater than one equals two.
One like then grade equals two.
Suppose above condition falls Alice
and then you now
target it.
It should be greater than equal to 75. Less than one lack.
Yes. Greater than equals to 75.
And yes, less than one lack more
to say the second condition.
Understand why no need.
If a faster condition falls,
then only you are reaching the second condition.
Faster. Condition falls means what?
Salary already less than one. Like understand that's why.
Yes. Greater equal. 75 then grade equals to B, B grade
the next ALI salary greater equals
to 50,000.
50,000. Then grade equals to C grade
because you are reaching a third step means salary.
The first condition already falls.
So here we should say one more. Zero.
First condition already falls. Second condition. False.
Then only you are reaching third condition.
You reached third means second already failed.
Second already failed means value less than 75.

Understand that's why grade equal to C, not
to check for that D.
First of false second falls. Third. False means what?
Already you said grade value. D. Got it?
Hmm. Now finally I'm going to return, sorry,
this is not a function.
I'm going to append grade.
Now look.
Both print salary,
great grade.
Look at this password like means A grade. Next one.
20,000 D, 10,000 D.
80,000, 90,000. B 70 C. Yeah.
Understand.
Uh, our python style.
This is general program style, our python style,
the expression for,
but to view that expression, you have lengthy steps.
Okay? Definitely we do mistake. That's why create function.
Auto to create definitely.
Let's say my function name is two grade input is what?
Salary keep the same grade equals
to D.
Default target A grade.
If salary equal to
that G equals to yeah.
L. If salary greater equals two
75,000
B grade salary greater
than equals two 50,000.
And finally that is C. C grade.
So function ready first I will test this function
working fine or not.
Two grade is our function. A one lack 40.

What is a grade expected?

Okay, got it.

Two grade off.

Two grade.

7, 8, 2

Grade off.

A grade.

Less than 50 grade

for the third grade, just check it.

Lower local variable.

GRD reference before assignment.

Where is GRD here?

What we're using GRD.

First we said great, well we got issue

with GR d now run the same thing.

And so

30,000 is degrade.

78 is big grade and 55 years. C grid. C grade.

Understood. Uh, now in our Python style, I'm going

to transform all the salaries.

These are original inputs radically on it.

Let's say, let's see,

but two

grade for V.

So try to map and list one by one.

List off zip off S Correct.

Just check this

all while is or not.

Just second.

Hmm, correct.

So in this way you can perform transformations.

Final transformation. One more thing. What is the time now

still?

One more example please.

You have employees like this
from the departments, different departments.
That's not
totally 12 employees think
that these 12 employees are from different departments.
Totally. How many departments you have? Okay, no.
5, 11, 12, 13, 14, 15.
I want to transform these numbers into department names.
Suppose 11, marketing 12 means hr.
13 is finance and 14, 15 remaining.
And I want to target only 11, 12 30
remaining all departments as other what?
What we are expecting if it is 11, marketing, hr,
finance, hr, marketing,
marketing, sorry.
And 30 finance. 14 hour, 15 hour.
Like on that way I want to transfer. Uh, come on directly.
The second wave, style or python? Exclusive style.
First creative function.
F two two department name
input is department number.
How many departments you have?
Marketing, hr, finance,
other totally four things you are targeting.
So default value.
If department number equals to level, then D
marketing a
department number equals to 12.
That department name HR
still department number equal to 13.
The department name.
If it is not level, not not 13 already.
Other, I'm going
check this, I'm going to apply on the transformation.

D name SQL two.
What is our function? Two
V, r, V in.
Now each number will be
transformed into the department names.
Understand, try to map them. List of,
so you'll see where our level is there.
That is marketing 12, HR 13 finance. And 1415.
Look into this other. Got it.
Now with the second way better way. I wanted to do this.
One more style.
I'm creating one more function.
Define 2D where?
DN four department name DNY is input.
I just wanna add only three departments.
11, 12, 13 create a dictionary.
DFO equal two seven.
What is the symbol? What is the key?
Department number is a key value market.
12 means hr 13 means
14, 15, 60 remaining.
All the things should be other. We cannot give keys for them
because how many numbers are there?
We don't. That's why.
What are the things that you want
to target to give them only?
Hmm. Now I have three
dm.
Mm What we are passing
department number are pass
after, not just we'll check uh D info of level.
What is expected? Sorry, two dm, two
DN is our function level.
I am passing.

I got marketing.
Perfect. Well
that should be HR 13.
Finance. Finance 14.
I will get error because 14 key is not
available in that picture.
Okay, easy. Tal already know this.
Not get off. Okay.
What it returns, what gut is doing, if available,
it returns value if not available, it returns from now.
For that, now I'm applying 20 default value.
First I passing 11.
If 11 past the marketing, I will get if 12 past,
if 13 past finance.
Other than these three,
which is not available in this dictionary.
If I pass, I will get other now test it.
But 14 simple.
We not in general languages,
we are using a switch case statement for this purpose,
but we don't have switch case statement in Python.
So that's why we took help of dictionary. Understand.
Okay, so in real time,
Can we use any techniques here?
I'm sorry, pardon? In real time we can use any technique
right here to get the output and on.
Yes. Okay. Any, any technique you can use.
But this is simple technique.
Okay. Understood.
Because traditional programming style like conditions,
conditional style, if you want to go like a DN vehicle equal
to 11 DN, vehicle equal to 12 DN equal to 30.
Like this thing that if I have a hundred departments,
how much lengthy of each statement then got it

instead going that directly can use diction.
Got it. So finally this function is working fine.
I'm going to apply this sum to the transformation.
Look at the DVOs. This is your original input.
I want to transform them into department names.
Let's say DN equal, what is the expression?
2D. Now let's say V,
R, VN, now D.
So each number is here. Come into department names.
Understand you can use anywhere.
Okay, so for today, we close this session
and tomorrow we'll go to the more transformations.
So finally, what is uh, like a land agenda of today?
Faster set after that.
Transformations with the traditional way
and our python style of way,
but more expressions are involving into this.
You are creating a function, how to call
that function into your transformation
before applying into the transformation.
How to test that transformation, test that function,
whether it is working fine or not.
If everything is good, then applying to transformation.
Got it. Okay. Thank you.

Video: Transformation Functions

Welcome to Python Sessions.
This is a sample structure of a record.
Each card has a double here.
That means each apply has a double here
and names are like this.
This is from 1213.

One more last record I will give here.
I have five employees here.
What is the data type of this info here? That is a list.
Totally five elements. Each element is what?
So totally input number of fields are file.
I want to create more number of fields.
Some fields I want to update. Some fields I want to create.
Okay, so my my required logic here,
although the expected transformations,
so Id, I don't want to disturb.
I will write my requirement here.
I it should be as id no change
if it is named the transformation expected
post letter into upper case
letters into my case.
We have created a function for it.
The next transformation for the gender salary
based on the salary, I want to create tax.
That's a 10% on the salary, hr,
20% on the salary,
and then net salary I want to target.
So three new fields I want to create
and also based on the salary, I want to
transform each employee into grades.
So greater than equals to one lack. Yeah. Great.
So greater than article to 75
and less than one lack.
That is B grade.
Similarly greater than articles to 50
and less than 75.
That is C grade and less than 50
degrade.
So this is my transformation expected
and also one more transformation department numbers.

I want to transform into department numbers
like 11 as marketing.
Follow US hr. Yeah.
13 as finance
remaining, I mean other than 11, 12, 13
as other.
So this is what I require that
with one single function, I want
to transform all these things.
Okay? So without like a complex functionality like this,
that means more number of transformations are involved.
Faster. Independent lead develop function
for each transformation.
Ladder club, all the things into one more function.
Let's target the name, what is expected
First letter remaining letters into layer
the function I'm creating here.
First up, passing some name here.
So given name might have like a left and right side.
Some right spaces cut off the
everything is converted into layer.
Separate first character enough.
Convert remaining
characters enough.
One color, that means second and words.
All remaining characters already.
Those are inter lawyer not need to say
finally you have C, bless us
string conation first character and romantic characters.
You are concor native. You are returning this expression.
So this is a logic for first upper test it
with some sample value or stopper off.
So space should be cut off
and that first letter head should be in upper case remaining

all the things into lower case.
So function, working fine.
Similarly, what is another transformation? Gender.
One more transformation I will include here
in the case of gender.
M as male. Similarly, Fs, S,
female, female.
If any other thing is there,
I want it as invalid.
So gender for the gender.
I'm going to write one more function here. The function.
I'm deaf to gender. Pass the gender value here.
Whenever you are getting a string,
always better practice first to cut up the spaces.
Cannot that into even the upper case value passed.
That is cannot.
Gender equals to saying
that in as a default value.
If G equals to yeah. Hmm.
What should be the general value
as if G equals to?
Yeah, the general equals to
if, first of all second.
False already default value,
which is inval parallel.
I'm going to return that gender.
Let's do test of it.
Whose gender of ya?
Even though if you pass capital letter, it'll work out.
If we keep some spaces also it'll work out.
Got it. I'm testing with the, yeah,
that is female testing
with some X
in value.

So function is working fine. Mm-hmm.
So tax that is a single line expression.
HRA single line expression. One more net salary.
That is also single line.
I'm not creating a function for it. Uh, come on next.
What's the next? I want salaries into grades.
Okay, let's say the function name is two
grade input is salary, whereas
for salary, how many grades?
Four grades we want to classify default lost grade D
and fixing as a default.
If salary greater than equals tools, one lack,
then I want grade value
as yes.
If alternative salary,
if salary greater than equal to 75,000 and salary.
Less than one lack, no need to say this one.
Because faster condition falls means what?
That is already less than one lack. Okay.
Then your grade is B.
Still salary greater than oracle equals
to 50,000.
Definitely that is less than 75.
Then grade equals to C
if it is less than 50 already.
Default value I have set here, which is AS and B.
So finally I'm ING grade.
So function ready for this, I'm going to test it.
What is the function there? Two grade one. Like 20,000.
I'm passing. I should get
a just 10,000.
I'm passing D.
60,000 C,
80,000 B grade.

So function is working fine.
The next step, what I'm going to do is
for the department numbers yesterday, we work
with the department number in two ways.
Okay? One is one help is with the dictionary directly.
The second technic, I'm taking define
to D, I'm passing DNO
into this as input.
That's a dictionary. DFO is a dictionary
of department numbers
and it's department name values
what the thing we wanted to call target.
Eleven, twelve, thirty. Just keep them. 11 is key.
11 is what? Marketing. 12 is key.
Hr
13 is key values.
Finance
the info dot get of the
OR to now just check it.
What is, what get function is doing if the given key
availability, it returns value.
If given key not available, it returns non empty object.
I mean non object. Just call
it 2D.
Name of
13, what should I get?
Finance because 13 available. That's why it's written.
Finance for example, 14 amp 14 not available.
I will get empty object, which is not,
I did not get any other here.
Suppose if the value is not available. Default value.
I'm fixing it here as other.
Now retest. This 2D of 40,
I got other understood this technique.

So this function I will use into the transformation.
Now I'm creating one final transformation.
One more final function.
The file
transform entire top.
I will pass into this one.
Let's say the top is E for employee.
So in our uh, input object info,
what is a high level data type?
That is a list. Each element is a top. The entire top.
I will pass into this now is at Apple.
Where is id? How is the schema fit?
You have the schema. First one id. Next one name. Next one.
Salary, then gender, then department.
So this is the structure of your apple. Come on.
Separate each entity. Id value EF zero.
Name EF one for this EF one.
I'll apply this past already. We created this function.
Understand? Hmm. Come on. Similarly, very salary.
That is in the second one. Second one means third one.
Third one means second. Index.
Based on this, I want to find out tax
salary into how much percentage?
10. That means 0.1. Next HRA 20%.
I want salary into 0.2.
Next net. Salary.
Salary. That's HRA minus tax.
Understand. Next, the grade
of the grade already have a function grade equal to
two grade two grade of salary.
Same thing for department name, master department number.
I will separate department number equal to what is position.
Last one. Yeah.
Minus salary already separate.

Next one. What is spending Department number is
spent two.
DM is a functional recent function.
Next, gender. Gender values.
Yeah, we have, we need to transform them as a male female.
Like that Gender equal to
first to separate that one.
Yeah. Minus two.
Minus two means lost to second one.
What is the function? Two
function, right?
All required transformations ready for
Id name salary tax.
HRA net salary after that.
Uh, gender.
After gender I want uh, department number. Department.
Department number. Probably nine fields that you are
input has five fields.
Output my nine fields. Got it.
I'm going to return a couple off.
I'm going to a past idea I want. Next. Next.
Next facts.
Hr, A net salary after that grade.
Then gender. For the gender. I set gender.
Then finally report number, department.
Totally 10 fields, I think including the department number.
So finally, input what is for this function?
What is the input? Input is a double
what this function is returning.
Finally, a double. Got it.
So this is what our required transformation
just to first test it before applying on the transformation.
Uh, what is the function name? Transform.
I'm passing one. Input as a pu.

I'd say 1 0 1

salary.

90. Gender.

M the value department number. Let's say 14.

Now look into the output of it.

Id name salary tax. HRA net.

Salary grade.

Gender, department number, department.

Okay, got it. So function independently working fine.

Now I'm going to apply this transformation on the data.

So what is your original data here?

The original data is info.

I want to apply about transformation

to each step directly.

Two ways of transformations, you know, traditional ways.

What list

after that far loop within the far loop apply logic

and then up the value to the T list.

That is traditional way.

Our Python exclusive style within the list.

Within the list. Left side expression, right side far. Okay.

Mm-hmm. Try to go with the second way directly.

New employee equal to

list expression.

Far what is a far look far? E in info.

So each value info is the least.

Each value in the info is a double. Now E is a double.

I'm passing the tap into transform function.

Transform off that. Now look into new EMP.

So each employee, because

of entities showing vertically line by line.

Let's try to print for V in

new m print that V.

Got it. So input has five fields.

Final output has then
fields later.
I want to write this result into file.
I can write this into file.
I can write this into some database. Understand.
So later, once we step into the file concept
and database's concept, we'll see how to load
and read from the files
and uh, from the tables of the database.
Okay? So in this way,
multiple transformations at a time we can, uh, perform
within a single function.
Got it.
Now final output is a new, new EMP.
Now I have a small question here.
Fa, what is a total net salary?
I don't want total salary. Total net salary reward.
All, All the employees.
Total net salary award.
Where is the position of the net salary?
This is salary tax. HRA.
This is net salary. That means what is your position?
Six to one. Six to one means index number.