Python - Module 10: Sets and Dictionary Operations

Python

Module 10: Sets and Dictionary Operations

Video: Introduction to Sets and Dictionary

Suppose you did BTech in the year

2015 after that Mtech

in 2017,

after that PhD in 2020.

With this information, I want to create a object this time.

I go for DIC stands

for dictionary.

Dictionary is a collection of key and value pairs.

It is a collection of

e and value

pay means you know what is

per pay means what?

Yeah, among two. One is key.

Second one is

value, but there are some rules.

Key should be unique.

What are the meaning of unique here?

Not duplicates. Key should be unique.

Second

value can be

right.

Come on, try to try to make this as a dictionary. Sir.

What is key? What is value here?

That qualification name is key value that year passed.

That is value. Okay, come on, make it.

That's a qualification. Q code. What is the symbol for it?

Curly. Curly bracket. First one always

pay is left side one value.

That means left side.

One component, right side one component here.

Pay before left side key before colon key.

What is that?

What is the pass out here? That is as well. Next page.

Amtech. What is the

key next?

PHD 22.

Understand. Now I want to know when did you pass out Mtech?

You welcome. It is passed.

Value will be return.

I'm saying queue of mtech mtech value or not.

So what is the reply?

2000 of

What? I will get 2000

of BTech.

2015 Q of MBA.

What is that? Address? E.

Understand how you are reading values

of list index.

Number first one you want means zero.

Second one, you want one like that?

Double values how you are reading. Double values.

Index number, how you are reading dictionary Values.

Values by passing key. Understand.

By passing key you are getting values. What is set?

Set Collection of

unique items are values.

Unique means you know no duplicates. I'm saying yes.

Se equal. How many values I have total.

Nine. Nine.

Values Line of As? What is output?

Four. Why?

Actually the value is 64 times right,

but it takes only value.

Ten two times takes only one time

value contains one unique values.

Just check the value.

10, 20, 40, 50, and 60.

Video: Set and Dictionary Operations Lab

I said

3, 6, 3 or six, still three.

What is the rule? He should be right?

So what will be the output of this one?

What will be the output of this one? A.

What is the value? No, 80 B.

What is the value? What are the latest value?

What about C? What is Mike?

If I have given duplicated case, what is happening?

Always latest will be available with you.

Finally, how many pairs you have? Three pairs.

Confirm this,

still have this.

Three. What are the values of X? Just check it.

What values you have. Yeah, latest value, right?

For B, also as well,

I'm taking your qualifications.

Suppose your qualification level. BTech you passed in 2018.

One more qualification. We

have 2020.

One more qualification. We have 20.

Now look into qualification.

I have three page,

my phrase.

List how you are accessing elements

if it is listed

or couple how you are accessing elements

by using index numbers,

but for DI dictionary index numbers will not work out.

Key. How to pass key.

If keys passed, value will be returned.

Suppose I want to know where Mtech passed out.

Qualification of MT or not.

If yes, it will get a value. The value is 2020.

Same style.

What is that? 2022 pastor

qualification, PH PhD

available in the dictionary Army.

No. So that you will get a key error. Key error.

The error message. Suppose if such kind

of statement is applied in the between the program

at some statement some keys passed into that,

but that key not available in the dictionary,

error will be thrown.

Your program execution will be stall.

You cannot go to the next state.

Understood for this, the solution

after here, if

before that, what is the dictionary name?

Qualification dot get function.

In the get function, I will pass the key.

For example, I'm passing BTech plus come

from a BTech available or not.

Yes, Yes. I will get value.

I'm passing mtech. Mtech.

Also available value be return

passing MBA, the MBA also available

2022 passing PhD

available or not.

Previously what you got? Yeah,

right now you don't get at that.

You get one blank object. You get one null object.

The nu object in Python. That's what I have used.

What is that? YE None. None.

I get none because of none. Nothing is displayed here.

Just apply the print. You can see print off.

Understood. Now tell me what is the functionality

of get function here.

Take the key into considerations

and get the, if there is no value,

Legal modify.

If given key exists, it value,

it does not none, but it is not throwing error.

Right? Okay. Okay.

Already know if statement.

What are the if statement format, if condition,

if I'm taking your bank accounts,

think that this is the bank in Shelly started

more customers to this bank.

You are the first customer after.

Now this is every, I'm running

this now.

Your first customer, your account number is 1 0 1.

You are going to deposit that 10,000 rupees. Understood.

Come on. Bank of account number.

Let's say the account number is key.

The value I'm giving one zero

amount, 10,000.

So which is key, which is value.

Tell me among these two account number is

key amount value.

Why? Account number is key.

It is unique because your account number 1 0 1 means

that should not be assigned to other person, right?

That should be unique, but your balance can be 10,000.

My balance also can be 10,000. Right?

Value can be duplicated.

Understand bank of account number

equal to now print over bank.

What is the reply? This is the way how

to insert a pair into dictionary initially.

How many pairs initially? How many pairs in the dictionary?

Zero. Now first time you are going

to insert one pair into the dictionary.

Now just check after accomplishment of this what happened.

One period added or not.

That means a dictionary is allowing a pending a pay or not.

But a syntax might be like this

statement might be like this.

So based on this dictionary is immutable or immutable?

Immutable. Understand.

Okay, first time 1 0 1 account inserted

after that, that's a second customer.

1 0 2. He is depositing

30,000 previously.

How many pets? One.

Now I got two pets.

Now my bank has two customers.

One more customer I'm adding later we play different styles.

Customer 1 0 3. The amount one

lack is depositing.

Now I have three account holders.

I mean three customers in the bank.

Okay, enough this, the number of customers are, okay,

your account number is 1 0 1.

Now we want to withdraw 3000 rupees.

You want to withdraw 3000 rupees.

Come on sir, help me.

What is your previous balance after withdraw? 3000.

That should be 7,000.

That means indirectly you're going to update it or not.

Come on. How to update Just sub

bank of what is your record

number minus SQL

to minus.

Because when our is done that should be deducted. Right?

Minus SQL to 3000. What should be the latest balance of you?

7,000. Check it.

Correct or not.

Now your latest balance 7,000

because sometimes you are 1 0 3.

Suppose if you are 1 0 3.

Your current balance, again, you are depositing 50,000.

This time you are depositing. Come on tell me.

Bank of 1 0 3 equals to

what should be the latest balance,

correct?

Yes. The dictionary

is allowing update or not.

It is allowing update. Allowing a pending, yes.

Update hours. Understood.

Okay, you decided 1 0 2 decided to cancel the account.

Delete help me. Uh, what is the statement?

Delete, But before deleting what should happen?

You are 1 0 2. We want to cancel account.

What should happen, first of all, first of all,

what should be the first functionality?

First you need to withdraw the money.

Understand first, withdraw the complete 30,000.

Then cancel account. Understand. Come on, do it first.

Withdraw complete amount.

Bank of one euro two minus SQL to bank of 1 0 2.

When our bank of one euro is passed, what will be returned?

30,000 will be understand. 30,000 will be returned.

Now bank of 1 0 2 minus SQL to 30,000 will be applied.

So that what should be the latest balance of you.

That is zero. Now daily you can cancel icon.

Understand. Now you can delete that.

Come on, tell me Dell Bank of one.

Now check the bank. Previously, three customers.

Now two

customers understand the point.

Okay? Now this is bank.

I have two customers, 1, 0, 1.

That is you one to withdraw 10,000.

You want to withdraw 10,000. What is your balance?

7,000. What do you want? 10,000.

But fund is not available, right? It has to show you.

Suppose you are asking 4,000 available or not.

Then that should be with the draw. Can you help me?

Not 4,000 statement. Come on.

10, 20, 40, 50 and 60

of zero.

What is the output?

This the next number six won't allow.

Understand but, but I want to read it.

I want to read it. Perform loop.

Perform loop, set interval, but it won't allow index numbers

or X and yes, X

got it.

Why disorder? Different order. You got it?

Yes. So in order collection,

every time you're using order will be changing.

Understand? That's why you cannot fix

like a proper index number.

Practice. Understood.

Based on this, some work.

These are the genders of your employees. Cost is male.

Second one, female. Female.

Again,

male, female.

Female. Totally. How many employees we have?

Seven. Seven. How many males?

How many females? My question,

all unique genders in our organization.

How to get it Master. What is the data type of gender?

Data type of gender list.

Convert that list into set first

when you convert into settle mail, only one time, right?

Email also one time, right?

Come on now, check the output.

No duplicates. Now for this apply land.

Understand there are two vendors.

Similarly, there is a sales transaction.

Your sales transactions are from different cities.

Let's say first transaction from Rabi, second, Bel.

Next again from Rabi, Rabi,

Delhi and

think that in this way hundred sub transactions happen.

Totally. How many transactions? Seven.

From how many From how many cities

your customers are from

or from how many cities that transactions happened.

This is my question. How to get it

set

answer should be.

That means what happened. Finally,

which function executed faster.

Set function.

Within that other function I have given

always faster in function will be executed.

The output is possible to upper function.

That means faster set is executed.

That is at least positive.

Now final result of line is, is three. Understood.

Now my student qualifications,

ptech we did from university.

Second student ptech from J and u.

One more. B, S, C from ou.

Next one. BO

from ou.

Next one. B, S.

What happened? This what will happen?

Key should be unique, right? Key should be unique, right?

So here BS available two times,

but this is a different student.

This is a different student in this case should not,

you should not maintain this as a dictionary like this.

Understand you make it like this.

1 0 1 is my first student. That is key.

That is valid. Understand if I

maintain student details like this in the dictionary,

my student number is key, is education details.

Sir, value.

Understand that in the education details I have couple

in the couple two fields are there.

What is that Your qualification name

and university understand.

What about second student 1, 0 2.

What is the value is a couple BTech from J and D.

Next 1, 0 3.

B-S-N-U-O. University.

Next

4, 1, 0 4,

The last student 1, 0 5, B, S,

A from U

somewhere it is missed, correct?

B. Where

we need comm because that is a couple.

We are keeping

total of five students for that five pair.

Now my question is like this lesson. Question.

Question. How many universities are there?

Three. Three. Three universities.

One. How to get that

set off?

Q.

Q dot values. Values.

Okay, enough.

Is it correct? What is expected? Answer?

Wait, wait. What is expected answer

I got like this

values what you get

as we did not run this now run this.

What is the output? All values have been collected

or not from this.

What do you want? What is your question?

How many universities? That means you are not interested

about complete story, right?

You need to pick only university. University. Come on.

Come on. Do it. Only university. Name one yesterday class.

The expression pa.

What is the far for university?

Pure values. This is for low.

I'm taking that university now check the values.

University is a double in the double low. Where?

Where is the university? Second one.

Second one means index number one.

Now check it when

university separated or not.

What this supply set,

what this supply set what you will get.

Only three J to UENU apply land. Now

what this result? I'm applying

Learn.

Check this. Now

what is our question?

How many, How many universities?

Finally we got it right like this.

Okay, just practice it.