Python slice() Function

Python slice() function is used to get a slice of elements from the collection of elements. Python provides two overloaded slice functions. The first function takes a single argument while the second function takes three arguments and returns a slice object. This slice object can be used to get a subsection of the collection. For example, if we want to get first two elements from the ten element?s list, here slice can be used. The signature of this function is given below.

Signature

slice (stop)

slice (start, stop[, step])

Parameters

start: Starting index of slicing.

stop: End index of the slice

step: The number of steps to jump.

It returns a slice object.

Let's see some examples of slice() function to understand it's functionality.

Python slice() Function Example 1

```
# Python slice() function example
# Calling function
result = slice(5) # returns slice object
result2 = slice(0,5,3) # returns slice object
```

Displaying result

print(result)

print(result2)

Output:

slice(None, 5, None)

slice(0, 5, 3)

Python slice() Function Example 2

Python slice() function example

Calling function

str1 = "Javatpoint"

slic = slice(0,10,3) # returns slice object

slic2 = slice(-1,0,-3) # returns slice object

We can use this slice object to get elements

str2 = str1[slic]

str3 = str1[slic2] # returns elements in reverse order

Displaying result

print(str2)

print(str3)

Output:

Jaot

toa

Python slice() Function Example 3

Python slice() function example

Calling function

```
tup = (45,68,955,1214,41,558,636,66)

slic = slice(0,10,3) # returns slice object

slic2 = slice(-1,0,-3) # returns slice object

# We can use this slice object to get elements

str2 = tup[slic]

str3 = tup[slic2] # returns elements in reverse order

# Displaying result

print(str2)

print(str3)
```

Output:

(45, 1214, 636)

(66, 41, 68)

Python slice() Function Example 4

```
# Python slice() function example

# Calling function

tup = (45,68,955,1214,41,558,636,66)

slic = slice(0,10,3) # returns slice object

slic2 = tup[0:10:3] # fetch the same elements

# We can use this slice object to get elements

str2 = tup[slic]

# Displaying result

print(str2)

print(slic2)
```

Output:

(45, 1214, 636)