

In PYTHON programming to find sub strings we can use the following 4 methods:

```
1 find()           2 index()
Backward direction:
1 rfind()          2 rindex()
```

Returns index of first occurrence of the given substring. If it is not available then we will get -1

```
String.find(substring, begin, end)
```

```
PyStr="Learning Python is Simpler"
print(PyStr.find("Python"))
print(PyStr.find("Data"))
print(PyStr.find("e"))
```

```
PyStr="Python is"
#String.find(substring,begin,end)
print(PyStr.find('i'))
print(PyStr.find('s'))
PyStr="Python is good one"
print(PyStr.find('o'))
print(PyStr.find('o',4))
print(PyStr.find('o',5))
print(PyStr.find('o',12,16))
print(PyStr.find('o',13,16))
print(PyStr.find('O',13,16))
```

```
PyStr="hellopythonisgreat"
print(PyStr.find('a'))
print(PyStr.find('b',7,15))
print(PyStr.find('t',7,15))
print(PyStr.find('t',8,15))
```

It returns the index of a substring inside the string (if found). If the substring is not found, it raises an exception.

```
str.index(sub[, start[, end]] )
```

```
PyStr='Python programming is fun'
print(PyStr.index('is fun'))
print(PyStr.index('ing', 10))
print(PyStr.index('g is', 10, -4))
```

Backward direction:

```
1 rfind()      2 rindex()
```

```
rfind()
```

It returns the highest index of the substring (if found). If not found, it returns -1.

Syntax:

```
str.rfind(sub[, start[, end]] )
```

Example:

```
PyStr="Learning Python is Simpler"
```

```
print(PyStr.rfind("S"))
```

```
print(PyStr.rfind("e"))
```

```
print(PyStr.rfind("o",10))
```

```
print(PyStr.rfind("e",15,25))
```

```
rindex()
```

It returns the highest index of the substring inside the string (if found). If the substring is not found, it raises an exception.

Syntax:

```
str.rindex(sub[, start[, end]] )
```

Example:

```
PyStr='Do small things with great love'
```

```
print(PyStr.rindex('u'))
```

```
print(PyStr.rindex('t', 2))
```

```
print(PyStr.rindex('h', 6, 20))
```

```
count()
```

It returns the number of occurrences of a substring in the given string.

### Syntax:

```
string.count(sub[, start[, end]])
```

### Example

```
PyStr = "Python is Awesome, Yes or Not"
```

```
print(PyStr.count('i'))
```

```
print(PyStr.count('o',1))
```

```
print(PyStr.count('s',10,25))
```

```
startswith()
```

It returns True if a string starts with the specified prefix(string). If not, it returns False.

Syntax:

```
str.startswith(prefix[, start[, end]])
```

Example:

```
PyTxt="Python programming is easy."
```

```
print(PyTxt.startswith('programming is', 7))
```

```
print(PyTxt.startswith('programming is', 7, 18))
```

```
print(PyTxt.startswith('programming is', 7, 21))
```

split() :

It splits a string into a list.

Syntax:

```
string.split(separator, max)
```

Example:

```
PyStr="hello my name is Raju"
```

```
print(PyStr.split(" "))
```

O/P:

```
['hello', 'my', 'name', 'is', 'Raju']
```

Example:

```
PyStr="hello#my#name is Raju"
```

```
print(PyStr.split("#"))
```

O/P:

```
['hello', 'my', 'name is Raju']
```

Example:

```
PyStr="hello#my#name is Raju"
```

```
print(PyStr.split("#",1))
```

O/P:

```
['hello', 'my'#'name is Raju']
```

Example:

```
PyStr="Hello-Welcome-To-PYTHON"
```

```
Str=PyStr.split('-')
```

```
for x in Str:
```

```
    print(x)
```

Example:Reading Multiple Inputs:

```
>>> x=input().split()
```

```
10 20 30
```

```
>>> x
```

```
['10', '20', '30']
```