Strings

" ",' ', """ ...."""

In [1]:
```
text  = 'Innomatics Technology Hub'
# shift + enter to excute the cell
```

type

In [3]:
```
type(text) # it will return data type of the attribute
```

Out[3]: str

len : which will return length or width

In [4]:
```
len(text)
```

Out[4]: 25

In [5]:
```
text
```

Out[5]: 'Innomatics Technology Hub'

In [6]:
```
# print 1st character text
text[0]
```

Out[6]: 'I'

In [8]:
```
# print 11th character
# 18th character
print(text[11],text[18])
print(text[11]+text[18])
```

```
T o
To
```

In [11]:
```
# Print last character in text
print(text[len(text)-1])
print(text[-1])
```

```
b
b
```

In [12]:
```
text
```

Out[12]: 'Innomatics Technology Hub'

In [13]:
```
# print 1st 10 characters in text
text[0]+text[1]+text[2]+text[3]+text[4]+text[5]+text[6]+text[7]+text[8]+text[9]
```

Out[13]: 'Innomatics'

: - range

In [14]:
```
start = 0
stop = 10
text[start:stop] # range = stop - start = 10 - 0 = 10 :characters
```

Out[14]: 'Innomatics'

In [18]:
```
text
```

Out[18]: 'Innomatics Technology Hub'

In [21]:
```
# print Last 10 characters in text
start = 15
stop = 25
text[start:stop]
```

Out[21]: 'nology Hub'

- Print 1st 3 characters
- Last 3 characters

In [22]:
```
text[0:3]
```

Out[22]: 'Inn'

In [23]:
```
text[:3]
```

Out[23]: 'Inn'

In [24]:
```
# last 3 chracters
text[-3:]
```

Out[24]: 'Hub'

In [26]:
```
text[22:]
```

Out[26]: 'Hub'

In [27]:
```
text
```

Out[27]: 'Innomatics Technology Hub'

In [29]:
```
# print alternate characters in text
text[::2]
```

Out[29]:
```
'Inmtc ehooyHb'
```

In [31]:
```
# print odd index characters in text
text[1::2]
```

Out[31]:
```
'noaisTcnlg u'
```

In [32]:
```
text
```

Out[32]:
```
'Innomatics Technology Hub'
```

In [40]:
```
# print text in reverse order
print(text[25::-1])
print(text[-1::-1])
```

```
buH ygolonhceT scitamonnI
buH ygolonhceT scitamonnI
```

Operations

+ , *

In [41]:
```
text + text
```

Out[41]:
```
'Innomatics Technology HubInnomatics Technology Hub'
```

In [42]:
```
txt = 'Innomatics'
```

In [47]:
```
txt* 100
```

Out[47]:
```
'InnomaticsInnomaticsInnomaticsInnomaticsInnomaticsInnomaticsInnomaticsInnomaticsInnomati
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```

Methods

In [49]:
```
text = 'Python is an interpreted high-level programming language for general-purp
```

In [51]:
```
len(text)
```

Out[51]:
```
247
```

In [53]:
```
text
```

Out[53]:
```
'Python is an interpreted high-level programming language for general-purpose p
rogramming. Created by Guido van Rossum and first released in 1991, Python has
a design philosophy that emphasizes code readability, notably using significant
whitespace'
```

In [52]:
```
text.count('Python') # shift + tab
# sub string , start , stop (range of index)
```

Out[52]:
```
2
```

In [56]:
```
# converting text into lower
text1 = text.lower()
text1
```

Out[56]:
```
'python is an interpreted high-level programming language for general-purpose p
rogramming. created by guido van rossum and first released in 1991, python has
a design philosophy that emphasizes code readability, notably using significant
whitespace'
```

In [60]:
```
search = 'Python'
search  = search.lower()
text1.count(search)
```

Out[60]:
```
2
```

In [62]:
```
# finding index postion of search words
ind = text1.find(search)
range_s = ind + len(search)
print('Index postion of {} is from {} to {}'.format(search,ind, range_s))
```

```
Index postion of python is from 0 to 6
```

1. write a program to find the the index the postion

- 1991
- philosophy
- whitespace
- high-level

2. Count number "a" in text

In [64]:
```
# finding index postion of search words
search = '1991'.lower()
ind = text1.find(search)
range_s = ind + len(search)
print('Index postion of {} is from {} to {}'.format(search,ind, range_s))

# finding index postion of search words
search = 'philosophy'.lower()
ind = text1.find(search)
range_s = ind + len(search)
print('Index postion of {} is from {} to {}'.format(search,ind, range_s))

# finding index postion of search words
search = 'whitespace'.lower()
ind = text1.find(search)
range_s = ind + len(search)
print('Index postion of {} is from {} to {}'.format(search,ind, range_s))

# finding index postion of search words
search = 'high-level'.lower()
ind = text1.find(search)
range_s = ind + len(search)
print('Index postion of {} is from {} to {}'.format(search,ind, range_s))
```

```
Index postion of 1991 is from 140 to 144
Index postion of philosophy is from 166 to 176
Index postion of whitespace is from 237 to 247
Index postion of high-level is from 25 to 35
```

In [65]:
```
text.count('a')
```

Out[65]:
```
19
```

In [68]:
```
text.title()
```

Out[68]:
```
'Python Is An Interpreted High-Level Programming Language For General-Purpose P
rogramming. Created By Guido Van Rossum And First Released In 1991, Python Has
A Design Philosophy That Emphasizes Code Readability, Notably Using Significant
Whitespace'
```

In [71]:
```
# convert into words
text.split(sep=',')
```

Out[71]:
```
['Python is an interpreted high-level programming language for general-purpose
programming. Created by Guido van Rossum and first released in 1991',
 ' Python has a design philosophy that emphasizes code readability',
 ' notably using significant whitespace']
```

In [72]:
```
text
```

Out[72]:
```
'Python is an interpreted high-level programming language for general-purpose p
rogramming. Created by Guido van Rossum and first released in 1991, Python has
a design philosophy that emphasizes code readability, notably using significant
whitespace'
```

In [ ]:
```

```