In [2]:
```
# functions with syntax
'''def function_name(parametrs(arguments)):
    statement(s)
'''
```

Out[2]:
```
'def function_name(parametrs(arguments)):\n    statement(s)\n'
```

In [3]:
```
# using function to print sum of two numbers
def Addsum():
    a=10
    b=20
    print(a+b)
Addsum()
```

```
30
```

In [4]:
```
# function to print name with use of paremeters(arguments)
def Username(name):
    print('my name is '+name)
Username(name=input('enter your name'))
```

```
enter your nameRajesh
my name is Rajesh
```

In [5]:
```
# 3 types paremeters or arguments in function
'''
1.Default arguments
2.Keyword arguments
3.variblelength arguments
'''
```

Out[5]:
```
'\n1.Default arguments\n2.Keyword arguments\n3.variblelength arguments \n'
```

In [5]:
```
# default arguments with example
def defargument(name,contact,age):
    print('i am ',name)
    print('my contact is:',contact)
    print('ny age is ',age)
```

In [6]:
```
defargument('Rajesh',123456,30)
```

```
i am  Rajesh
my contact is: 123456
ny age is  30
```

In [7]:
```
defargument('Rajesh',9441989019,30)
```

```
i am  Rajesh
my contact is: 9441989019
ny age is  30
```

In [8]:
```
'''Keyword Arguments(when we call a function with some values these vales
get assigned to the arguments according to their positions)
'''
def key_argument(name,email,phone,address):
    print('my name is ',name)
    print('my email is ',email)
    print('my conatact is ',phone)
    print('my address is ',address)
```

In [10]:
```
key_argument(email='rajesh@gmail.com',phone='9441989019',\
             name='Rajesh',address='JNTUACE')
```

```
my name is  Rajesh
my email is  rajesh@gmail.com
my conatact is  9441989019
my address is  JNTUACE
```

In [12]:
```
'''variable length arguments
sometimes we dont know the how many number of arguments passed in function.
that situations python allows many values with name of single argument

'''
def user_name(*name):
    for i in name:
        print('my name is',i)
user_name('venkatesh',123,'prasanna','sairam')
```

```
my name is venkatesh
my name is 123
my name is prasanna
my name is sairam
```

Strings

- Collection of charecters enclosed by single quotaions or double quotaions
- 'apssdc','apssdc123','apssdc@1234@#@#'

In [13]:
```
a='anantapur'
b='atp515001'
c='anantapur@123@#@'
print(type(c))
```

```
<class 'str'>
```

In [22]:
```
a='anantapur'
```

In [23]:
```
#dir(str)
```

In [24]:
```
a='ananatapur'
dir(a)
```

Out[24]:
```
['__add__',
 '__class__',
 '__contains__',
 '__delattr__',
 '__dir__',
 '__doc__',
 '__eq__',
 '__format__',
 '__ge__',
 '__getattribute__',
 '__getitem__',
 '__getnewargs__',
 '__gt__',
 '__hash__',
 '__init__',
 '__init_subclass__',
 '__iter__',
 '__le__',
 '__len__',
 '__lt__',
 '__mod__',
 '__mul__',
 '__ne__',
 '__new__',
 '__reduce__',
 '__reduce_ex__',
 '__repr__',
 '__rmod__',
 '__rmul__',
 '__setattr__',
 '__sizeof__',
 '__str__',
 '__subclasshook__',
 'capitalize',
 'casefold',
 'center',
 'count',
 'encode',
 'endswith',
 'expandtabs',
 'find',
 'format',
 'format_map',
 'index',
 'isalnum',
 'isalpha',
 'isascii',
 'isdecimal',
 'isdigit',
 'isidentifier',
 'islower',
 'isnumeric',
 'isprintable',
 'isspace',
```

```
 'istitle',
 'isupper',
 'join',
 'ljust',
 'lower',
 'lstrip',
 'maketrans',
 'partition',
 'replace',
 'rfind',
 'rindex',
 'rjust',
 'rpartition',
 'rsplit',
 'rstrip',
 'split',
 'splitlines',
 'startswith',
 'strip',
 'swapcase',
 'title',
 'translate',
 'upper',
 'zfill']
```

In [25]:

```
# single line string
a='apsdahdakhsjahskasjaksaskahaksjakskashakjhkjhskahskaj'
print(a)
```

```
apsdahdakhsjahskasjaksaskahaksjakskashakjhkjhskahskaj
```

In [17]:

```
# multi line string
b='''
ananrapur
jksjaksh
Rajesh
'''
print(b)
```

```

ananrapur
jksjaksh
Rajesh
```

In [18]:
```
# accessing charecters in a string
a='anantapur'
# 2 types index accessing charecters
# 1.forward index 2.backword index
# a p s s d c
# 0 1 2 3 4 5(forward index)
# a  p  s  s  d  c
#-6 -5 -4 -3 -2 -1 (backward index)
a[-3]
```

Out[18]: 'p'

In [19]:
```
# slicing
b='anantapur jntuacea  anbvsna'
b[7:17]
```

Out[19]: 'ur jntuace'

In [20]:
```
b[:7]
```

Out[20]: 'anantap'

In [21]:
```
a='anantapur'
a[-5:-1]
```

Out[21]: 'tapu'

In [26]:
```
dir(str)
```

Out[26]:
```
['__add__',
 '__class__',
 '__contains__',
 '__delattr__',
 '__dir__',
 '__doc__',
 '__eq__',
 '__format__',
 '__ge__',
 '__getattribute__',
 '__getitem__',
 '__getnewargs__',
 '__gt__',
 '__hash__',
 '__init__',
 '__init_subclass__',
 '__iter__',
 '__le__',
 '__len__',
 '__lt__',
 '__mod__',
 '__mul__',
 '__ne__',
 '__new__',
 '__reduce__',
 '__reduce_ex__',
 '__repr__',
 '__rmod__',
 '__rmul__',
 '__setattr__',
 '__sizeof__',
 '__str__',
 '__subclasshook__',
 'capitalize',
 'casefold',
 'center',
 'count',
 'encode',
 'endswith',
 'expandtabs',
 'find',
 'format',
 'format_map',
 'index',
 'isalnum',
 'isalpha',
 'isascii',
 'isdecimal',
 'isdigit',
 'isidentifier',
 'islower',
 'isnumeric',
 'isprintable',
 'isspace',
 'istitle',
```

```
 'isupper',
 'join',
 'ljust',
 'lower',
 'lstrip',
 'maketrans',
 'partition',
 'replace',
 'rfind',
 'rindex',
 'rjust',
 'rpartition',
 'rsplit',
 'rstrip',
 'split',
 'splitlines',
 'startswith',
 'strip',
 'swapcase',
 'title',
 'translate',
 'upper',
 'zfill']
```

In [28]:
```
a='anantapur'
a.upper()
```

Out[28]: 'ANANTAPUR'

In [29]:
```
a='ANANTAPUR'
a.lower()
```

Out[29]: 'anantapur'

In [32]:
```
a='jntuacea anantapur'
a.capitalize()
```

Out[32]: 'Jntuacea anantapur'

In [33]:
```
a='venkatesh vijayawada'
a.title()
```

Out[33]: 'Venkatesh Vijayawada'

In [34]:
```
a= 'jntuacea'
b= 'anantapur'
a+' '+b
```

Out[34]: 'jntuacea anantapur'

In [35]:
```
a='anantapur'
b='12'
a+b
```

Out[35]: 'anantapur12'

In [36]:
```
# split()
a='anantapur@ap'
a.split('@')
```

Out[36]: ['anantapur', 'ap']

In [81]:
```
a='i am venkatesh,from guntur,andhra pradesh'
a.split(',')
```

Out[81]: ['i am venkatesh', 'from guntur', 'andhra pradesh']

In [84]:
```
a='1 2 3 4 5 6 7'
a.split()
```

Out[84]: ['1', '2', '3', '4', '5', '6', '7']

In [37]:
```
# join()
a=['i am Rajesh','software trainer']
'@'.join(a)
```

Out[37]: 'i am Rajesh@software trainer'

In [38]:
```
a=['i','am','Rajesh']
' '.join(a)
```

Out[38]: 'i am Rajesh'

In [93]:
```
a='i am venkatesh'
b=a.split()
'@'.join(b)
```

Out[93]: 'i@am@venkatesh'

In [39]:
```
a='i am Rajesh'
b='software trainer'
c=a+b#i am venkateshsoftware trainer
'@'.join(c)
```

Out[39]: 'i@ @a@m@ @R@a@j@e@s@h@s@o@f@t@w@a@r@e@ @t@r@a@i@n@e@r'

In [100]:
```
# format() return specified values in string
a='i am venkatesh,my age is {}'
age=26
a.format(age)
```

Out[100]: 'i am venkatesh,my age is 26'

In [110]:
```
a='i am {},my salary{},working in {}'
salary=30000
add='guntur'
name='venkatesh'
a.format(name,salary,add)
```

Out[110]: 'i am venkatesh,my salary30000,working in guntur'

In [40]:
```
# count() returns the number of times a specified char in a string
a='jntuacea rajesh andhra pradeshZ'
a.count('Z')
```

Out[40]: 1

In [116]:
```
#isalpha() returns True is all charecters in a string are in the alphabet
a='jntauceaVijayawada'
a.isalpha()
```

Out[116]: True

In [118]:
```
#isdigit() return True if all charecters in the string are digits
b='123345q'
b.isdigit()
```

Out[118]: False

In [122]:
```
#isalnum() returns true if all charecters in the are alphanumerics
b='1223alskals'
b.isalnum()
```

Out[122]: False

In [124]:
```
#islower() returns true if all char in the strings are lower case
a='apssdc'
a.islower()
```

Out[124]: True

In [126]:
```
#isupper()
a='APSSDDC'
a.isupper()
```

Out[126]: True

In [ ]:
```

```