# PYTHON

# Python

# Python ¶

In [3]:
```
"Python"
'python'
```

Out[3]: 'python'

In [4]:
```
"Python"
print('python')
```

```
python
```

In [5]:
```
1234326
```

Out[5]: 1234326

In [6]:
```
print('python')
print('training')
```

```
python
training
```

In [7]:
```
v=10
print(v)
print(type(v))
```

```
10
<class 'int'>
```

In [8]:
```
x="sravani"
print(x)
print(type(x))
```

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

In [9]:
```
e=12.45
print(type(e))
print(e)
```

```
<class 'float'>
12.45
```

In [13]:
```
### TASK

z="sravani"
print(type(z))
print('str')
a=12
print(type(a))
print('int')
q=2.45
print(type(q))
type(q)
```

```
<class 'str'>
str
<class 'int'>
int
<class 'float'>
```

Out[13]:
```
float
```

## checking Python Version

### System Version

In [14]:
```
import platform
print(platform.python_version())
print(platform.sys.version)
```

```
3.7.1
3.7.1 (default, Dec 10 2018, 22:54:23) [MSC v.1915 64 bit (AMD64)]
```

In [15]:
```
import sys
print(sys.version)
```

```
3.7.1 (default, Dec 10 2018, 22:54:23) [MSC v.1915 64 bit (AMD64)]
```

## Comments

In [24]:
```
#Print('py')
'''print(1211334)
print(IIIT)'''
print("sravani")
"""print("BARU")"""
print("Bhargavi")
```

```
sravani
Bhargavi
```

In [27]:
```
print(12,3,56,sep='hdg',end=' ')
print('hello')
```

```
12hdg3hdg56 hello
```

In [28]:
```
help(print)
```

```
Help on built-in function print in module builtins:

print(...)
    print(value, ..., sep=' ', end='\n', file=sys.stdout, flush=False)

    Prints the values to a stream, or to sys.stdout by default.
    Optional keyword arguments:
    file:  a file-like object (stream); defaults to the current sys.stdout.
    sep:   string inserted between values, default a space.
    end:   string appended after the last value, default a newline.
    flush: whether to forcibly flush the stream.
```

In [29]:
```
help(sys)
```

```
Help on built-in module sys:

NAME
    sys

MODULE REFERENCE
    https://docs.python.org/3.7/library/sys (https://docs.python.org/3.7/library/sys)

    The following documentation is automatically generated from the Python
    source files.  It may be incomplete, incorrect or include features that
    are considered implementation detail and may vary between Python
    implementations.  When in doubt, consult the module reference at the
    location listed above.

DESCRIPTION
    This module provides access to some objects used or maintained by the
    interpreter and to functions that interact strongly with the interpreter.
```

In [30]:
```
#Create different type of values with diffeerent varibles
i=20
print(i,type(i))
f=3.14
print(f,type(f))
b=True
print(b,type(b))
```

```
20 <class 'int'>
3.14 <class 'float'>
True <class 'bool'>
```

## Boolean Varibles

In [31]:
```
print(True)
```

```
True
```

In [32]:
```
print(bool(0))
print(bool(1))
```

```
False
True
```

In [33]:
```
print(True+True)
print(True+False)
print(False+False)
print(False+True)
```

```
2
1
0
1
```

In [38]:
```
print(3*" Hello")
```

```
 Hello Hello Hello
```

In [39]:
```
print("Hello "*3)
```

```
Hello Hello Hello
```

In [40]:
```
print(3//2)
```

```
1
```

In [41]:
```
print(3.0//2)
```

```
1.0
```

In [42]:
```
print(3//2.0)
```

```
1.0
```

In [43]:
```
int(34.5)
```

Out[43]:
```
34
```

In [44]:
```
float(22)
```

Out[44]:
```
22.0
```

In [45]:
```
str(65)
```

Out[45]:
```
'65'
```

In [46]:
```
bool("Heloo")
```

Out[46]:
```
True
```

In [47]:
```
bool('')
```

Out[47]:
```
False
```

In [48]:
```
bool("")
```

Out[48]:
```
False
```

## Type Connversions

In [2]:
```
a=10
type(a)
s1="Python"
type(s1)

h1=12.3423
type(h1)
float(str(int(h1)))
```

Out[2]:
```
12.0
```

In [3]:
```
n2=10
n3=n2 **12
type(n3)
len(str(n3))
word=10**75
len(str(word))
type(str(word))
```

Out[3]:
```
str
```

In [5]:
```
number=56
sd="string"
number=str(number)
```

In [7]:
```
number=type
st=45
number(st)
```

Out[7]:
```
int
```

In [9]:
```
num=str
num(45)
```

Out[9]:
```
'45'
```

## Operators

- 
  - 
    - / % //

In [ ]:
```
print(2+3)
print(3-2)
print(3*2)
print(3/2)
```

In [ ]:
```
print(2/3)
```

In [51]:
```
print(3%2)
```

```
1
```

In [52]:
```
print(2%3)
```

```
2
```

In [53]:
```
print(10//2)
```

```
5
```

In [54]:
```
print(13//2)
```

```
6
```

In [55]:
```
a=10
b=12
print(a+b)
```

```
22
```

In [57]:
```
c="sravani"
d="sravs"
print(c+d)
print(c-d)
```

```
sravanisravs

---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-57-05a9bd40e8e1> in <module>
      2 d="sravs"
      3 print(c+d)
----> 4 print(c-d)

TypeError: unsupported operand type(s) for -: 'str' and 'str'
```

# Task On Operators

In [62]:
```
#orange=3 prince per one 6
#apples=9 price 10
#Total Price interms of multiples of 10's
orange=3
apples=9
total=6*orange+10*apples
print(total//10)
```

```
10
```

# Strings

In [63]:
```
print("Hello")
```

```
Hello
```

In [65]:
```
print("Hello\nThis is python")
```

```
Hello
This is python
```

In [66]:
```
s="Hello world"
s
```

Out[66]: 'Hello world'

In [67]:
```
print(s)
```

```
Hello world
```

## String slicing

In [68]:
```
s[0:]
```

Out[68]: 'Hello world'

In [69]:
```
print(s[0:])
```

```
Hello world
```

In [70]:
```
print(s[0:5])
```

```
Hello
```

In [71]:
```
print(s[0::])
```

```
Hello world
```

In [72]:
```
print(s[0::2])
```

```
Hlowrd
```

In [73]:
```
print(s[0::0])
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-73-3867e8f253d7> in <module>
----> 1 print(s[0::0])

ValueError: slice step cannot be zero
```

In [74]:
```
print(s[0::1])
```

```
Hello world
```

In [75]:
```
print(s[::-1])
```

```
dlrow olleH
```

In [76]:
```
print(s[0::3])
```

```
Hlwl
```

In [78]:
```
p="python vs java"
p.capitalize()
```

Out[78]:
```
'Python vs java'
```

In [79]:
```
p.lower()
```

Out[79]:
```
'python vs java'
```

In [80]:
```
p.upper()
```

Out[80]:
```
'PYTHON VS JAVA'
```

In [81]:
```
p.swapcase()
```

Out[81]:
```
'PYTHON VS JAVA'
```

In [82]:
```
print(p)
```

```
python vs java
```

In [83]:
```
p.title()
```

Out[83]:
```
'Python Vs Java'
```

In [84]:
```
len(p)
```

Out[84]:
```
14
```

In [85]:
```
dir(p)
```

Out[85]:
```
['__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 [88]:
```
a="Hello World"
```

In [89]:
```
a.casefold()
```

Out[89]:
```
'hello world'
```

In [91]:
```
a.center(5)
```

Out[91]:
```
'Hello World'
```

In [92]:
```
a.split()
```

Out[92]:
```
['Hello', 'World']
```

In [93]:
```
a.count('o')
```

Out[93]:
```
2
```

In [103]:
```
print(a.join(p[0:6]))
```

```
pHello WorldyHello WorldtHello WorldhHello WorldoHello Worldn
```

In [104]:
```
print(a.strip(' '))
```

```
Hello World
```

# Assignment Try Remaining Functions

In [97]:
```
a.translate('e')
```

Out[97]: 'Hello World'

In [98]:
```
a.strip()
```

Out[98]: 'Hello World'

In [99]:
```
a.strip(' ')
```

Out[99]: 'Hello World'

In [114]:
```
a.rstrip('')
```

Out[114]: 'Hello World'

In [109]:
```
a.rsplit(" ")
```

Out[109]: ['Hello', 'World']

In [122]:
```
a.index('Hello')
```

Out[122]: 0

In [123]:
```
a.index('World')
```

Out[123]: 6

In [124]:
```
a.index('W')
```

Out[124]: 6

In [125]:
```
a.index('o')
```

Out[125]: 4

In [126]:
```
a.find('l')
```

Out[126]: 2

In [128]:
```
a.rfind('W')
```

Out[128]: 6

In [136]:
```
a.ljust(8)
```

Out[136]: 'Hello World'

In [143]:
```
a.maketrans()
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-143-5e5619d722ee> in <module>
----> 1 a.maketrans()

TypeError: maketrans() takes at least 1 argument (0 given)
```

In [149]:
```
a.__sizeof__()
```

Out[149]:
```
60
```

In [150]:
```
isspace
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-150-7881b69331b0> in <module>
----> 1 isspace(a)

NameError: name 'isspace' is not defined
```

In [148]:
```
# Find the length of the string
#change the string to lowercase
#print the string in reverse order
#split the string
#print the string without spaces
#Find how many times "s" is repeates in a given string
#Take a string "python programming by python platform" find how many times "pytho
```

In [112]:
```
#Find the length of the string
s="sravani sravs"
print(len(s))
```

```
13
```

In [113]:
```
#Change the string to lowercase
print(s.lower())
```

```
sravani sravs
```

In [115]:
```
#print the string in reverse order
print(s[::-1])
```

```
svars inavars
```

In [116]:
```
#split the string
s.split()
```

Out[116]:
```
['sravani', 'sravs']
```

In [117]:
```
#print the string without spaces
s.replace(" ","")
```

Out[117]:
```
'sravanisravs'
```

In [118]:
```
s.count('s')
```

Out[118]:
```
3
```

In [119]:
```
e="python programming by python platforn"
e.count('python')
```

Out[119]:
```
2
```

In [2]:
```
#Reading input from key board
a=int(input('Enter number'))
print(a)
print(type(a))
```

```
Enter number12
12
<class 'int'>
```

In [7]:
```
#Read two numbers from key board and print their sum
s=int(input('enter the numbers'))
y=int(input('enter the numbers'))
print(s+y)
```

```
enter the numbers3
enter the numbers4
7


####
```

In [ ]:
```
#Read an integer value and string.repeat the string integer number of time
# ex:3,hello
#output hello helo hello
k=int(input('Enter the number'))
g=input('Enter the string')
print( k* (g))
```

In [ ]:
```
#Read both first name and last name from key board print outpu
# 1.First name last name Ex:Sravani sravs
#2.Last name First name Ex:Sravs Sravani
#3.First name last name separated by space
# First name last name separated by dot
e=input('Enter the first name:')
d=input('Enter the last name:')
print(e,d)
print(d,e)
print(e+"."+ d)
print(d +"."+ e)
```

In [ ]:
```

```

In [ ]:
```

```