Python Basics

In [1]:
```
"python"
'python'
```

Out[1]:
```
'python'
```

In [2]:
```
123
```

Out[2]:
```
123
```

In [3]:
```
print('Python')
print('Training')
```

```
Python
Training
```

In [4]:
```
e=143
print(e)
print(type(e))
```

```
143
<class 'int'>
```

In [5]:
```
v='python'
print(v)
print(type(v))
```

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

In [6]:
```
e
```

Out[6]:
```
143
```

In [7]:
```
e=10.5
type(e)
```

Out[7]:
```
float
```

Data Type Of Variables

In [11]:
```
a=10
b=2.5
c="divya"
print(type(a))
type(a)
print(type(a))
type(b)
print(type(a))
type(c)
```

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

Out[11]:
```
str
```

In [103]:
```
print(True)
```

```
True
```

In [104]:
```
print(True+False)
print(True+True)
print(False+False)
print(False+True)
```

```
1
2
0
1
```

Type Conversions

In [8]:
```
a=10
type(a)
s1="python"
type(s1)
h1=12.345
type(h1)
float(str(int(h1)))
```

Out[8]:
```
12.0
```

In [14]:
```
n1=110
n1%11
n2=10
n3=n2**12
type(n3)
str(n3)
len(str(n3))

word=10 ** 75
len(str(word))
type(str)
```

Out[14]: 76

Task on Operators

In [12]:
```
#orang=3 price per one 6
#apples=9 price 10
#Total price interms of multiples of 10's
oranges=3
apples=9
tot=oranges*6
tot1=apples*10
print((tot+tot1)//10)
```

```
10
```

Checking Python Version

System Version

In [63]:
```
import platform
print(platform.python_version())
print(platform.sys.version)
```

```
3.7.3
3.7.3 (default, Apr 24 2019, 15:29:51) [MSC v.1915 64 bit (AMD64)]
```

In [66]:
```
import sys
print(sys.version)
```

```
3.7.3 (default, Apr 24 2019, 15:29:51) [MSC v.1915 64 bit (AMD64)]
```

Comments

In [82]:
```
#print(123)
'''print("this is string")
print("this is python")'''
print('python')
```

```
python
```

In [98]:
```
print(1,2,3,4,"hello",sep="hdg")
print("python")
```

```
1hdg2hdg3hdg4hdghello
python
```

In [100]:
```
print(1,2,3,4,"hello",sep="hdg",end=' ')
print("python")
```

```
1hdg2hdg3hdg4hdghello python
```

In [102]:
```
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.
```

Operators

In [101]:
```
print(2+3)
print(4-2)
print(3*2)
print(10/2)
print(10//2)
print(10%2)
```

```
5
2
6
5.0
5
0
```

In [105]:
```
print(3*"hello")
```

```
hellohellohello
```

In [106]:
```
print("hello "*3)
```

```
hello hello hello
```

In [107]:
```
print(3//2)
```

```
1
```

In [108]:
```
print(3.0//2)
```

```
1.0
```

In [109]:
```
print(3//2.0)
```

```
1.0
```

In [110]:
```
int(34.5)
```

Out[110]:
```
34
```

In [111]:
```
float(34)
```

Out[111]:
```
34.0
```

In [112]:
```
str(65)
```

Out[112]:
```
'65'
```

In [113]:
```
bool('hello')
```

Out[113]:
```
True
```

In [114]:
```
bool("")
```

Out[114]:
```
False
```

Strings

In [13]:
```
print("Hello")
```

```
Hello
```

In [14]:
```
print("Hello This is python")
```

```
Hello This is python
```

In [15]:
```
print("Hello \n This is python")
```

```
Hello
 This is python
```

In [16]:
```
s="Hello world"
s1=print(s)
print(s1)
```

```
Hello world
None
```

In [115]:
```
a="Hello"
b="world"
a+b
```

Out[115]: 'Helloworld'

String Slicing

In [17]:
```
s[0:5]
```

Out[17]: 'Hello'

In [18]:
```
print(s[0:5])
```

```
Hello
```

In [19]:
```
s[2:4]
```

Out[19]: 'll'

In [20]:
```
print(s[2:4])
```

```
ll
```

In [21]:
```
s[0::]
```

Out[21]: 'Hello world'

In [22]:
```
s[0::2]
```

Out[22]: 'Hlowrd'

In [23]:
```
s[0::1]
```

Out[23]: 'Hello world'

In [24]:
```
s[0::-1]
```

Out[24]: 'H'

In [25]:
```
s[::-1]
```

Out[25]: 'dlrow olleH'

In [29]:
```
p="python vs java"
p.capitalize()
```

Out[29]: 'Python vs java'

In [30]:
```
p.upper()
```

Out[30]: 'PYTHON VS JAVA'

In [31]:
```
p.lower()
```

Out[31]: 'python vs java'

In [32]:
```
s="this IS mOHIJNI"
s.swapcase()
```

Out[32]: 'THIS is Mohijni'

In [33]:
```
s.title()
```

Out[33]: 'This Is Mohijni'

In [34]:
```
len(s)
```

Out[34]: 15

In [35]:
```
dir(s)
```

Out[35]:
```
['__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 [39]:
```
s="mOhini IS GOOD"
s.casefold()
```

Out[39]: 'mohini is good'

In [55]:
```
s="MOHINI IS GOOD"
s.center(5)
```

Out[55]: 'MOHINI IS GOOD'

In [56]:
```
s.split()
```

Out[56]: ['MOHINI', 'IS', 'GOOD']

In [60]:
```
s.count('I')
```

Out[60]: 3

Task

In [87]:
```
#Print the string without spaces
s="Mohini is Good"
s.replace(" ","")
```

Out[87]: 'MohiniisGood'

In [85]:
```
#Print the length of the string
print(len(s))
```

```
14
```

In [88]:
```
#Change the string to lowercase
print(s.lower())
```

```
mohini is good
```

In [89]:
```
#Change the string in reverse order
print(s[::-1])
```

```
dooG si inihoM
```

In [90]:
```
#Split the string
print(s.split())
```

```
['Mohini', 'is', 'Good']
```

In [91]:
```
#Find how many times "s" is repeated in a given string
print(s.count('s'))
```

```
1
```

In [93]:
```
#Take a string "python programming by python platforms"
#Find how many times "python"  is repeated
a="python programming by python platforms"
print(a.count("python"))
```

```
2
```

Try remaining string functions

In [122]:
```
s="mohini is a good girl"
print(s.find('g'))
```

```
12
```

In [3]:
```
a=input("Enter number:")
print(a)
```

```
Enter number:mohini
mohini
```

In [4]:
```
b=int(input("Enter number::"))
print(b)
```

```
Enter number::45
45
```

In [8]:
```
#Read 2 numbers from keyboard and print their sum
a=int(input("First number:"))
b=int(input("Second number:"))
print(a+b)
```

```
First number:2
Second number:3
5
```

In [7]:
```
#Read an integer value and a string.repeat the string integer number of times
#ex 3,hello
#output hello hello hello
num=int(input("Enter number:"))
s=input("Enter string:")
print(s*num)
```

```
Enter number:4
Enter string:mohini
mohini mohini mohini mohini
```

In [3]:
```
#Read both first name and last name from keyboard ,print output
# 1.First name last name eg:mohini nydana
# 2.Second name last name eg:nydana mohini
# 3.First name last name seperated by space
# 4>First name last name seperated by .
fname=input()
lname=input()
print(fname+lname)
print(lname+fname)
print(fname+" "+lname)
print(lname+"."+fname)
```

```
mohini
nydana
mohininydana
nydanamohini
mohini nydana
nydana.mohini
```

In [ ]:

In [ ]: