Python_Basics(DATA_MINDS)

September 2, 2023

[2]:
```
#Variable-Kind of a location name where we store the data
```

[3]:
```
a=10
```

[6]:
```
a
```

[6]: 10

[7]:
```
virat=22
```

[8]:
```
virat
```

[8]: 22

[9]:
```
a+virat
```

[9]: 32

[10]:
```
#Type funtion - Used for check what kind of datatype is used
```

[11]:
```
type(virat)
```

[11]: int

[14]:
```
B=7.36
```

[15]:
```
B
```

[15]: 7.36

[16]:
```
type(B)
```

[16]: float

[17]:
```
c=22.545
```

[18]:
```
type(c)
```

[18]:
```
float
```

[19]:
```
Name="Virat Tiwari"
```

[20]:
```
type(Name)
```

[20]:
```
str
```

[21]:
```
Intro="This is my first DS python Class"
```

[22]:
```
type(Intro)
```

[22]:
```
str
```

[23]:
```
n=True
```

[24]:
```
type(n)
```

[24]:
```
bool
```

[25]:
```
m=False
```

[26]:
```
type(m)
```

[26]:
```
bool
```

[27]:
```
#In python True=1 and false=0
```

[28]:
```
n+m
```

[28]:
```
1
```

[29]:
```
True*True
```

[29]:
```
1
```

[30]:
```
True*False
```

[30]:
```
0
```

[31]:
```
# in core python it always shows error
True/False
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In [31], line 1
----> 1 True/False
```

```
ZeroDivisionError: division by zero
```

[32]:
```
# in core python it always shows error
1/0
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In [32], line 1
----> 1 1/0

ZeroDivisionError: division by zero
```

[33]:
```
#Complex No(a+bi)
#python only understand the small j as a imaginary

v=5+6j
```

[34]:
```
type(v)
```

[34]: complex

[35]:
```
v.imag
```

[35]: 6.0

[36]:
```
v.real
```

[36]: 5.0

[37]:
```
v
```

[37]: (5+6j)

[38]:
```
#print() funtion is used for print something in a console
```

[39]:
```
print("Heya This is Virat Tiwari")
```

```
Heya This is Virat Tiwari
```

[40]:
```
print(a)
```

```
10
```

[41]:
```
print(virat)
```

```
22
```

[52]:
```
d="Datascience"
```

[43]:
```
d
```

[43]: 'Data science'

[44]:
```
type(d)
```

[44]: str

[45]:
```
#Python stores string in a form of INDEXING
# It starts from 0
```

[46]:
```
#For retreiving the from the index we have to used square brackets

d[0]
```

[46]: 'D'

[47]:
```
d[2]
```

[47]: 't'

[53]:
```
d[6]
```

[53]: 'i'

[54]:
```
d[-1]
```

[54]: 'e'

[56]:
```
d[0:4]
```

[56]: 'Data'

[59]:
```
d[4:]
```

[59]: 'science'

[70]:
```
d[0:11:2]
```

[70]: 'Dtsine'

[75]:
```
len(d)
```

[75]: 11

[76]:
```
d[::2]
```

[76]:
```
'Dtsine'
```

[80]:
```
d[::-1]
```

[80]:
```
'ecneicsataD'
```

[81]:
```
d[2:11:-1]
```

[81]:
```
''
```

[82]:
```
d[11:0]
```

[82]:
```
''
```

[83]:
```
d[11:0:-1]
```

[83]:
```
'ecneicsata'
```

[85]:
```
d[-2:-8:-1]
```

[85]:
```
'cneics'
```

[86]:
```
d[-2::-1]
```

[86]:
```
'cneicsataD'
```

[88]:
```
d[-2::]
```

[88]:
```
'ce'
```

[90]:
```
d[::-1]
```

[90]:
```
'ecneicsataD'
```

[93]:
```
d[::100]
```

[93]:
```
'D'
```

[94]:
```
d[:-100:]
```

[94]:
```
''
```

[95]:
```
d[:-100:-1]
```

[95]:
```
'ecneicsataD'
```

[2]:
```
#String Manipulation

s="This is string manipulation"
```

[3]:
```
len(s)
```

[3]: 27

[5]:
```
s.find("s")
```

[5]: 3

[8]:
```
s.find("m")
```

[8]: 15

[10]:
```
s.count("s")
```

[10]: 3

[11]:
```
s.count("g")
```

[11]: 1

[12]:
```
s.count("z")
```

[12]: 0

[13]:
```
s
```

[13]: 'This is string manipulation'

[14]:
```
s.upper()
```

[14]: 'THIS IS STRING MANIPULATION'

[16]:
```
s.lower()
```

[16]: 'this is string manipulation'

[17]:
```
s.title()
```

[17]: 'This Is String Manipulation'

[18]:
```
s.capitalize()
```

[18]: 'This is string manipulation'

[19]:
```
#Concatination is always done in between same type of data types
#str+str
#int+int
#float+float
```

[20]:
```
g="Heya rahul "
```

[21]:
```
h=",how are you?"
```

[22]:
```
g+h
```

[22]:
```
'Heya rahul ,how are you?'
```

[ ]:
```
#FOR MULTIPLE COMMENTS WE HAVE TO USED
#CTRL+SLASH

# this is virat tiwari
# here we discuss about python that is used in
# data science and we learn also machine laearning as well in future stages
```