Data Types in Python

[3]:
```
#There are six type data types (data structures)
#1. Numbers - Integer (whole number), float(Decimal number)
#2. string - char/text
#3. List
#4. Tuple
#5. Set
#6. Dictionary
```

[5]:
```
a = 15
```

[7]:
```
print(a)
```
```
15
```

[9]:
```
print(a)
```
```
15
```

[15]:
```
type(a)
```

[15]:
```
int
```

[17]:
```
b = 15.756
```

[19]:
```
type(b)
```

[19]:
```
float
```

[21]:
```
c = "Ashish"
```

[25]:
```
print(c)
```
```
Ashish
```

[27]:
```
type(c)
```

[27]:
```
str
```

Operators in Python

[30]:
```
#Numbers - Integer (whole number), float(Decimal number)
#1.Arithmetic Operators = +,-,/,*,%,**
#2.Compartive Operators = >=,<=,==,!=
#3.Assignment Operators = +=,=-,*=,%=
#4.Logical Operators = AND, OR, NOT
#5.Membership operator = IN
#6.Identity Operators = IS
```

[20]:
```
#1.Arithmetic Operators = +,-,/,*,%,**

a=10
b=20
c=17
d="ashish"
```

[44]:
```
a,b,c,d
```

[44]:
```
(10, 20, 17, 'ashish')
```

[40]:
```
print(a+b)
```
```
30
```

[64]:
```
print("Addition :", a+b)
print("Substration : ", b-a)
print("multiplication : ", a*b)
print("Division :",b/c)
print("power :",a**2)
print("floor :", b//c)
```
```
Addition : 30
Substration :  10
multiplication :  200
Division : 1.1764705882352942
power : 100
floor : 1
```

[60]:
```
10*10
```

[60]:
```
100
```

[66]:
```
#2.Compartive Operators = >=,<=,==,!=
```

[22]:
```
a,b,c
```

[22]:
```
(10, 20, 17)
```

[70]:
```
a>b
```

[70]:
```
False
```

[72]:
```
a<b
```

[72]:
```
True
```

[74]:
```
b>c
```

[74]:
```
True
```

[76]:
```
a
```

[76]:
```
10
```

[78]:
```
a==b
```

[78]:
```
False
```

[80]:
```
a=b
```

[82]:
```
a,b,c
```

[82]:
```
(20, 20, 17)
```

[84]:
```
a==b
```

[84]:
```
True
```

[86]:
```
a!=b
```

[86]:
```
False
```

[88]:
```
a=15
```

[90]:
```
a,b,c
```

[90]:
```
(15, 20, 17)
```

[92]:
```
a!=b
```

[92]:
```
True
```

[94]:
```
#3.Assignment Operators = +=,-=,*=,%=
```

[96]:
```
a,b,c
```

[96]:
```
(15, 20, 17)
```

[98]:
```
a
```

[98]:
```
15
```

[100]:
```
a=a+1
```

[102]:
```
a
```

[102]:
```
16
```

[104]:
```
a=a+2
```

[106]:
```
a
```

[106]:
```
18
```

[108]:
```
a+=1
```

[110]:
```
a
```

[110]:
```
19
```

[112]:
```
a-=1
```

[114]:
```
a
```

[114]:
```
18
```

[116]:
```
a-=2
```

[118]:
```
a
```

[118]:
```
16
```

[120]:
```
a*=2
```

[122]:
```
a
```

[122]:
```
32
```

[124]:
```
a*=2
```

[126]:
```
64
```

[126]:
```
64
```

[128]:
```
#4.Logical Operators = AND, OR, NOT
```

[130]:
```
a,b,c
```

[130]:
```
(64, 20, 17)
```

[136]:
```
a>b and a>c
```

[136]:
```
True
```

[138]:
```
a>b and c>a
```

[138]:
```
False
```

[140]:
```
a>b or c>a
```

[140]:
```
True
```

[144]:
```
a>b and a>c
```

[144]:
```
True
```

[152]:
```
not b>a
```

[152]:
```
True
```

[ ]:
```
#5.Membership operator = IN
```

[2]:
```
"a" in "Ravi"
```

[2]:
```
True
```

[4]:
```
"x" in "Ravi"
```

[4]:
```
False
```

[10]:
```
"2" in "123"
```

[10]:
```
True
```

[12]:
```
"4" in "123"
```

[12]:
```
False
```

[14]:
```
#6.Identity Operators = IS
```

[24]:
```
a,b,c
```

[24]:
```
(10, 20, 17)
```

[26]:
```
a==b
```

[26]:
```
False
```

[28]:
```
a is b
```

[28]:
```
False
```

[30]:
```
a=b
```

[32]:
```
a,b,c
```

[32]:
```
(20, 20, 17)
```

[34]:
```
a is b
```

[34]:
```
True
```

[47]:
```
#BILLING PROGRAMMING

product = "pen"
quantity = 100
price = 15

basic_amount = quantity * price
Tax = basic_amount * 0.10
total_billing_amount = basic_amount+Tax

print("product: ",product)
print("quantity: ",quantity)
print("price: ",price)
print("*****************************")
print("basic_amount: ", basic_amount)
print("Tax: ", Tax)
print("total_billing_amount: ", total_billing_amount)

print("*****Thank you, visit again*********")
```

```
product:  pen
quantity:  100
price:  15
*****************************
basic_amount:  1500
Tax:  150.0
total_billing_amount:  1650.0
*****Thank you, visit again*********
```

[ ]:

[ ]: