01Variables

December 23, 2023

```
[117]:  #Python Variables for Beginners!

        #This notebook has been created by Freaktos.

        #I wish y'all succsess :))
```

```
[118]:  #int (integer (numeric))
        #str (string (text??))
        #bool (boolean)
        #float
```

```
[119]:  #### Variables can be a same name but cannot be same type.
        userage = 10 #lowercase
        userAge = 20 #camelCase
        user_Age = 30 #snake_case
        Userage = 40 #wtf is this?
        USERAGE = 50 #UPPERCASE

        print(userage, userAge,user_Age, Userage,USERAGE)

        #and cant start with numbers or special chars. should start with string.
```

```
10 20 30 40 50
```

```
[120]:  # Variables are hide value inside and provides that value when we need.

        x = 5
        y = 4

        print(x+y)

        #this commmand print collection VALUE of x and y variables, not x and y.
        #and basically its gives result as 9 not xy.
        #if you change values of this variables as numeric value and gives math.␣
         →process, it will do.
        #but if you give it an string value program will gives an error !!!(variables␣
         →should exact same type of value for process.
        #you can easly collect number but also string (text) values for example;
```

```python
z = "sur"
a = "name"

print(z+a)
# be sure giving same type values of variables for execute without errors!
#this value shouldnt write inside of quotes. because in python every value
 →inside in quote detect as string.
```

```
9
surname
```

```python
[121]: x*y*10
```

```
[121]: 200
```

```python
[122]: x*x*x*x
```

```
[122]: 625
```

```python
[123]: x ** 4
```

```
[123]: 625
```

```python
[124]: #remainder
       10 % 2
```

```
[124]: 0
```

```python
[125]: 11 % 2
```

```
[125]: 1
```

```python
[126]: ### input from user.
       age = input("Insert your age:")

       print(age)
       type(age)
       #if you didnt convert input to int. you can get errs. sometimes. and please dont
        →forget
       #every numeric char. didnt equals to ineteger every time!
```

```
Insert your age: 19

19
```

```
[126]: str
```

```python
[127]: #for convert this variable;
       #int() convert value to integer if it can!
```

```python
birthDate = int(input("Insert yout birthdate:"))
print(birthDate)
type(birthDate)

#lets make basic age calculator with collecting data from user!
```

```
Insert yout birthdate: 2004

2004
```

[127]: int

[128]:
```python
currentYear = int(input("Type current year:"))

birth_date = int(input("Type birthday (only year):"))

print("Your age was:", currentYear - birth_date)
#dont forget to comma (,) for print multiple things... i've search it about 4-5␣
 ↪minutes.  :(
```

```
Type current year: 2023
Type birthday (only year): 2004

Your age was: 19
```

[129]:
```python
## lets write some str. functions

b = "Lets split this sentence word by word."
r = "Lets split this sentence word by word."

#if you want to split sentences or values inside of variable. just SPLIT it!
b.split()
```

[129]: ['Lets', 'split', 'this', 'sentence', 'word', 'by', 'word.']

[130]:
```python
#start with upper letter.
r.capitalize()
```

[130]: 'Lets split this sentence word by word.'

[131]:
```python
#MAKE IT BIGGER.
r.upper()
```

[131]: 'LETS SPLIT THIS SENTENCE WORD BY WORD.'

[132]:
```python
#count letters.
len(b)
```

[132]: 38

```
[133]: creator = "Freaktos"
       len(creator)
```

[133]: 8

```
[134]: #newline
       print("Hello \nWorld!")
```

```
Hello
World!
```

```
[135]: ####INDEX
       name = "Abraham Lincoln"

       #index is basically numbers of letters
       # its start from 0 to end.
       #names 3. index is "n" letter because its start with 0.


       name[4]


       # you see? its count " " (spaces) as index of this variable
```

[135]: 'h'

```
[136]: ## getting index reverse side
       name[-4]
```

[136]: 'c'

```
[137]: ###SLICING
       ##we can get special index from inside of variable
       name[2:5]
       #its get index between 2. and 5. chars.
```

[137]: 'rah'

```
[138]: # getting first 3 letters
       name[:3]
```

[138]: 'Abr'

```
[139]: #getting letters after first 3 letter
       name[3:]
```

[139]: 'aham Lincoln'

```
[140]: # Step size
       name[::2]
```

[140]: 'ArhmLnon'

[141]: name[::-1]

[141]: 'nlocniL maharbA'