Variable

A variable is a **NAME** of a **MEMORY** Location at that Location we need to store some Value.

a = 10

10			
1001	1002	1003	1004
1005	1006	1007	10 1008
100 1009	1010	1011	10 1012

```
print(a)
print(memoryview(bytes(a)))
#10
#<memory at 0x00000174A8F3E880>
# 0-15
# 0-9 , A-F , 16bits , 0x = Hexa Decimal
10
<memory at 0x00000174A9106400>
10
<memory at 0x00000174A91064C0>
```

```
a=input()
b=input()
d=a+b
c=a*b #Exception
print(d)
#10
#20
#100200
```

Types of Variables

1. Input Variable
2. Output Variable

```
a=input( )
b=input( )
c=a+b
print(c)
```

IV	OV
a	c
b	

Input Variable

input( ) ─── String

int(input( ))

float(input())

─── Data Type Methods / Functions

Types of Variable Names

abc
xyz

Pascal Case

Each & Every Word First letter should be Capital

AbcXyz

Snake Case

Each & Every word Join with the Symbol Underscore _

abc_xyz

Camel Case

Second Word First Character should be Caps

abcXyz

Rules for a Variables

Variable name Starts with Alphbets or Underscore
It should not start with digits
No White Space is allowed
Its Doest conatin any Special Character Except Underscore
Its Contains Digits Except Start Character
Its a Case Sensitive
Keywords not treat as Variable Name

Assigining Multiple Values to Multiple Variables at Once

a =10

a , b , c = 10 , 20 , 30

Variable   **Values**

a,b,c=10,20,30
print(a+-b+1-b)#20
#1
#-29

Assigning Multiple Values to a Single Variable

$$a = 10 , 20 , 30$$

(10,20,30)