

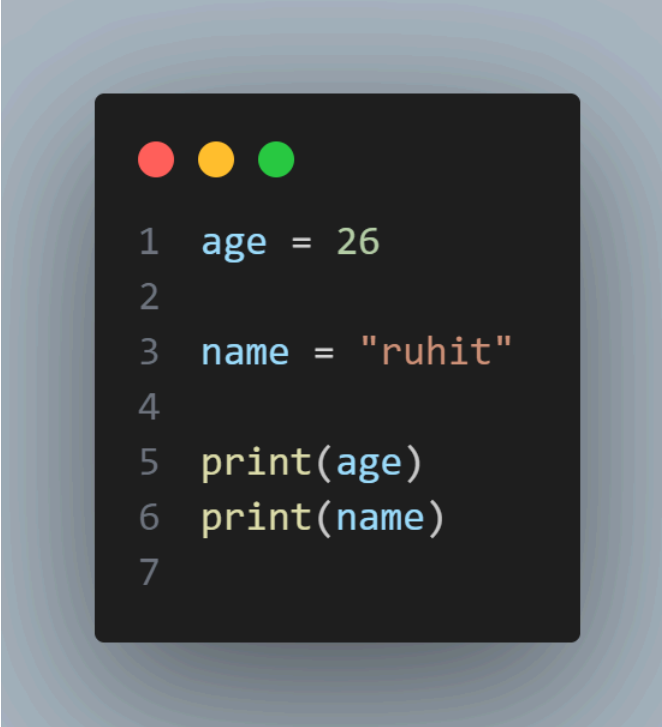
Variable ,Operator and Typecasting in Python

Variable

A variable is like a box where you can store something in Python.

- You can store numbers, text, or other things.
- You can use the box name to get the value later.

Example:

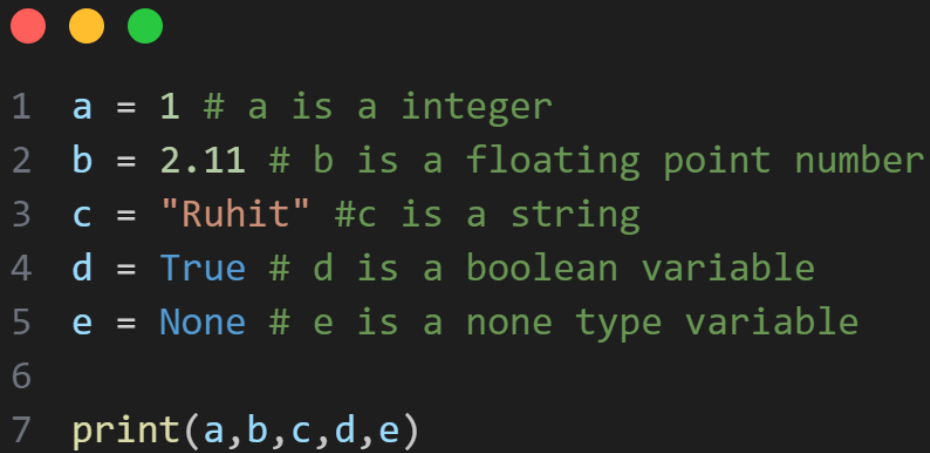


```
1 age = 26
2
3 name = "ruhit"
4
5 print(age)
6 print(name)
7
```

`print(age)` # Output: 20

`print(name)` # Output: Ruhit

Data Types In Python

A terminal window with a dark background and three colored window control buttons (red, yellow, green) at the top left. It contains seven lines of Python code with syntax highlighting: line 1 assigns 'a' to 1 (integer), line 2 assigns 'b' to 2.11 (float), line 3 assigns 'c' to 'Ruhit' (string), line 4 assigns 'd' to True (boolean), line 5 assigns 'e' to None (None type), line 6 is empty, and line 7 prints all variables.

```
1 a = 1 # a is a integer
2 b = 2.11 # b is a floating point number
3 c = "Ruhit" #c is a string
4 d = True # d is a boolean variable
5 e = None # e is a none type variable
6
7 print(a,b,c,d,e)
```

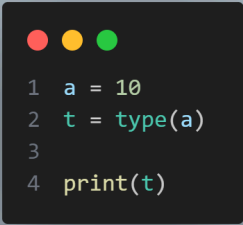
Operators in Python

1. Arithmetic Operators: +, -, *, / etc
2. Assignment Operators: =, +=, -= etc
3. Comparison Operators: ==, >, >=, <, <= etc
4. Logical Operators: and, or, not.

type() function:

- type() tells Python **what type of data** a variable has.

Example:

A terminal window with a dark background and three colored window control buttons (red, yellow, green) at the top left. It contains four lines of Python code: line 1 assigns 'a' to 10, line 2 assigns 't' to type(a), line 3 is empty, and line 4 prints 't'.

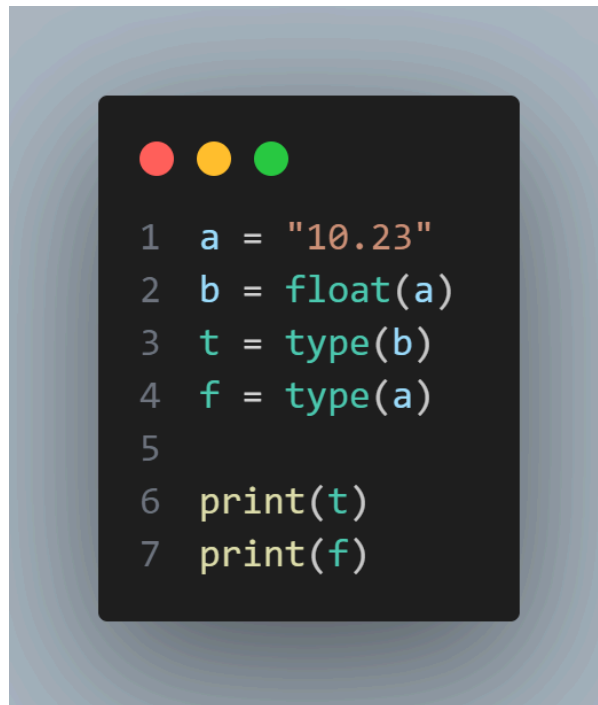
```
1 a = 10
2 t = type(a)
3
4 print(t)
```

Output: <class 'int'>

Typecasting

- **Typecasting** means **changing a variable from one type to another**.

Example:



```
1 a = "10.23"
2 b = float(a)
3 t = type(b)
4 f = type(a)
5
6 print(t)
7 print(f)
```

Output:

<class 'float'>

<class 'str'>

The input() function lets the user type something into the program.

- Whatever the user types is always stored as a string.



```
1 a = int(input("Enter First Number: "))
2 b = int(input("Enter Second Number: "))
3
4 print("First Number is: ",a)
5 print("Second Number is: ",b)
6 print ("Sum is: ",a+b)
```

Output:

Enter First Number: 10

Enter Second Number: 20

First Number is: 10

Second Number is: 20

Sum is: 30



```
1 a = input("Enter First Number: ")
2 b = input("Enter Second Number: ")
3
4 print("First Number is: ",a)
5 print("Second Number is: ",b)
6 print ("Sum is: ",a+b)
```

Output:

Enter First Number: ru

Enter Second Number: hit

First Number is: ru

Second Number is: hit

Sum is: ruhit