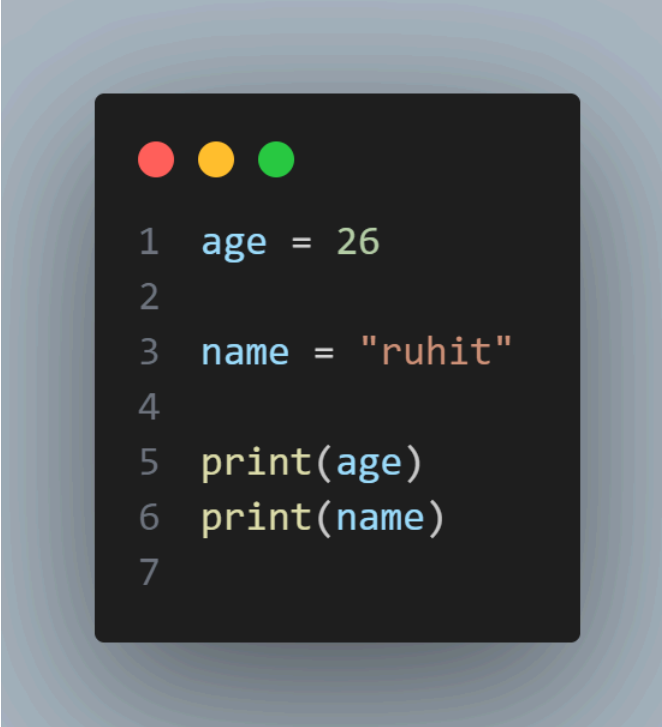# Variable ,Operator and Typecasting in Python

Variable

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

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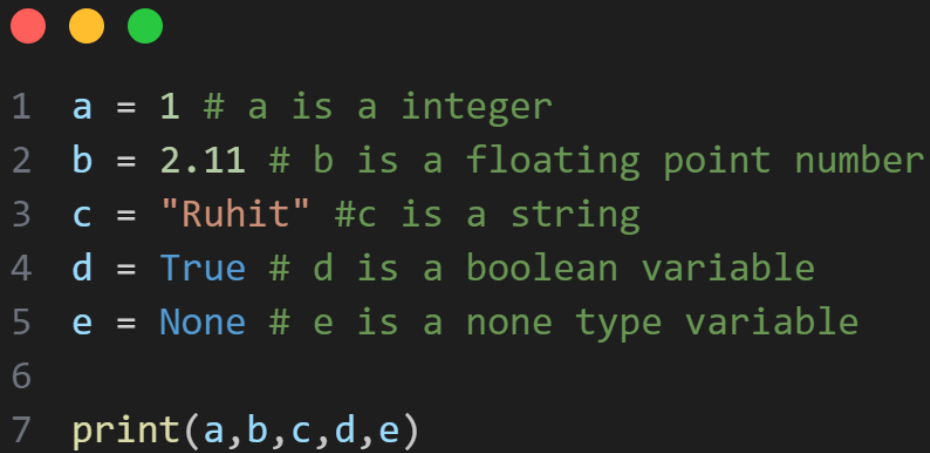
- You can use the box name to get the value later.

Example:

```python
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

```
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)
```
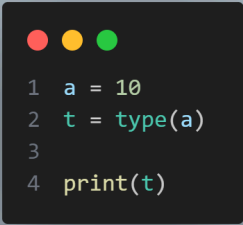
Operators in Pyhton

1. Arithmetic Operators: +,-,*,/ etc

2. Assignment Operators: =,+=,-= etc

3. Comparison Operators: ==,>,>=,<,!= ect

4. Logical Operators: and,or,not.

type() function:

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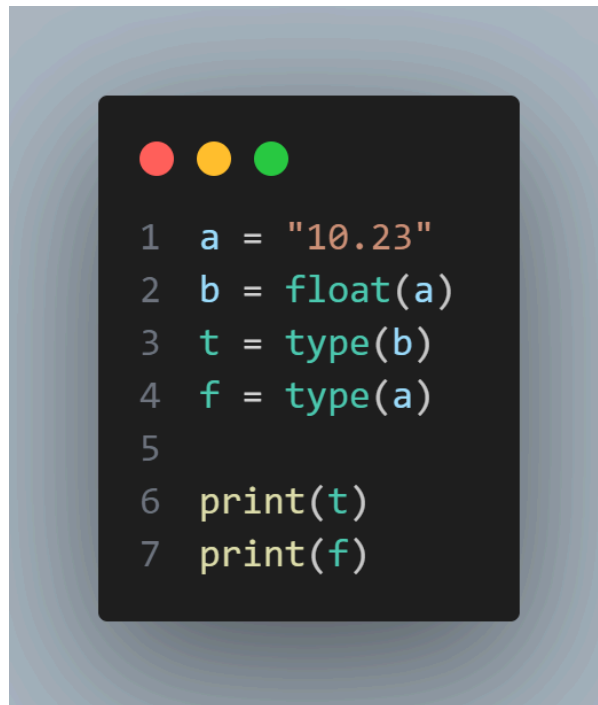
Example:

```
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:

```python
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.

```python
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