13-7-2019

Variables

There are 2 types of variables
- System Variables
- User-Defined Variables

```
import os
os.path
os.env //Get Environment Variables
os.getenv("name") // Get Environment Variables
```

Class

```
class Test():
    def__init__(self,name,address):
        self.name=name
        self.name=address

    def name(self):
        print(f"My Name is {self.name}")

    def address(self):
        print(f"Address is {self.address}")

F=Test("Google","California")
F.name()
F.address()
```

System Variables Are Variables which is set by the system and will be available at run time

- import OS
- all the system variables can be seen with the help of os package
- we can set new variables also

```
def test():
    a=2
    b=3
    x=a+b
    return x


y=test()
print(y)
```

Arguments

- Formal Arguments
    - Formal Arguments Which you define inside your class or script
- Command Line Arguments
    - Command Line arguments to pass from command line
    - Will be taken in argv(Argument Vector)

```
class Args():
    def name(self,name):   //name is an argument
        print(name)

a=Args()
a.name("hello")
```

```
class sum
    def add(self,a,b):
        return a+b
```

```
class out():
    def print_result(self):
        x=sum()
        y=x.add(2,4)
        print(y)

O=Out()
O.print_result()
```

Method

- Instance Method
- Class Method

.

Write A Python program which takes 3 command line arguments and does the operation using third argument on first 2 argument

```
import sys
class args():
    def __init__(self,a,b,op):
        self.a=a
        self.b=b
        self.op=op


    def calc(self):
        if(self.op == "+"): return (self.a+self.b)
```

```
        elif(self.op == "-"):  return (self.a-self.b)
        elif(self.op == "*"):  return (self.a*self.b)
        elif(self.op == "/"):  return (self.a/self.b)


K=args(int(sys.argv[1]),int(sys.argv[2]),sys.argv[3])
print(K.calc())
```