

```
from flask import Flask
app = Flask(__name__)

@app.route('/')
def hello_world():
    return "Hello all"

if __name__ == '__main__':
    app.run()
```

Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

```
>>> a=10
```

```
>>> print(id(a))
```

```
2134276663888
```

```
>>> b=73.3
```

```
>>> print(type(b))
```

```
<class 'float'>
```

```
>>> #multiple variable
```

```
>>> a,b,c=30,10,20
```

```
>>> print(a)
```

```
30
```

```
>>> print(b)
```

```
10
```

```
>>> print(c)
```

```
20
```

```
>>> # delete values
```

```
>>> del a
```

```
>>> prin(a)
```

```
Traceback (most recent call last):
```

```
File "<pyshell#11>", line 1, in <module>
```

```
    prin(a)
```

```
NameError: name 'prin' is not defined
```

```
>>>
```

Calculator Program in Python

```
def add(x, y):
```

```
    return x + y
```

```
def subtract(x, y):
```

```
    return x - y
```

```
def multiply(x, y):
```

```
    return x * y
```

```
def divide(x, y):
```

```
    return x / y
```

```
print("Select operation.")
```

```
print("1.Add")
```

```
print("2.Subtract")
```

```
print("3.Multiply")
```

```
print("4.Divide")
```

```
choice = input("Enter choice(1/2/3/4): ")
```

```
if choice in ('1', '2', '3', '4'):
```

```
    num1 = float(input("Enter first number: "))
```

```
    num2 = float(input("Enter second number: "))
```

```
if choice == '1':
```

```
    print(num1, "+", num2, "=", add(num1, num2))
```

```
elif choice == '2':
```

```
    print(num1, "-", num2, "=", subtract(num1, num2))
```

```
elif choice == '3':
```

```
    print(num1, "*", num2, "=", multiply(num1, num2))
```

```
elif choice == '4':  
    print(num1, "/", num2, "=", divide(num1, num2))  
  
else:  
    print("Invalid Input")
```

Concatenation in python

```
str1="Hello"  
str2="World"  
print ("String 1:",str1)  
print ("String 2:",str2)  
str=str1+str2  
print("Concatenated string is ",str)
```

Reverse a string in python

```
str = "IBM"  
print ("The original string is ",str)  
reverse_String = ""  
count = len(str)  
while count > 0:  
    reverse_String += str[ count - 1 ]  
    count = count - 1  
print ("The reversed string is ",reverse_String)
```

Slice a string in python

```
String = 'IBM Cloud'
```

```
s1 = slice(3)  
s2 = slice(-5,-1)  
  
print(String[s1])  
print(String[s2])
```

List operations in Python

```
if __name__ == '__main__':
    N = int(input())
    m=list()
    for i in range(N):
        method,*l=input().split()
        k=list(map(int,l))
        if len(k)==2:
            q=[k[0]]
            w=[k[1]]
        elif len(k)==1:
            q=[k[0]]
        if method == 'insert':
            m.insert(q[0],w[0])
        elif method == 'append':
            m.append(q[0])
        elif method == 'remove':
            m.remove(q[0])
        elif method == 'print':
            print(m)
        elif method == 'reverse':
            m.reverse()
        elif method == 'pop':
            m.pop()
        elif method == 'sort':
            m.sort()
    for i in range (N):
        print(m[i])
```

Why is Python a popular programming language?

It uses a simplified syntax
with an emphasis on natural
language, for a much easier
learning curve for beginners.

And, because
Python is free to use and is
supported by an extremely large
ecosystem of
libraries and packages,
it's often the first-choice
language for new developers.

What are the other Frameworks that can be used with python?

There are many frameworks used with Python, some are

Bottle
Flask
Django
Web2py
AIOHTTP
CherryPy
Dash
Falcon
Growler
UvLoop
Pyramid
Sanic
CubicWeb
TurboGears
Hug
MorePath

Full form of WSGI
Web Server Gateway Interface