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MAX MARK	2 Marks

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

```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