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

@app.route('/')
def hello_world():
   return "Hello all i'M james jacobraj"

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 = 'IBMCloud'

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