1. **Consider a list (list = []). You can perform the following commands:**

```
if __name__ == '__main__':
    N = int(input())
    L=[];
    for i in range(0,N):
        cmd=input().split();
        if cmd[0] == "insert":
            L.insert(int(cmd[1]),int(cmd[2]))
        elif cmd[0] == "append":
            L.append(int(cmd[1]))
        elif cmd[0] == "pop":
            L.pop();
        elif cmd[0] == "print":
            print(L)
        elif cmd[0] == "remove":
            L.remove(int(cmd[1]))
        elif cmd[0] == "sort":
            L.sort();
        else:
            L.reverse();
```

2.

i) Write a Calculator program in Python?

```
# Program make a simple calculator

# This function adds two numbers
def add(x, y):
    return x + y

# This function subtracts two numbers
def subtract(x, y):
    return x - y

# This function multiplies two numbers
def multiply(x, y):
    return x * y

# This function divides two numbers
```

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


print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

while True:
    # take input from the user
    choice = input("Enter choice(1/2/3/4): ")

    # check if choice is one of the four options
    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))

        # check if user wants another calculation
        # break the while loop if answer is no
        next_calculation = input("Let's do next calculation? (yes/no): ")
        if next_calculation == "no":
          break

    else:
        print("Invalid Input")
```

ii) Write a program to concatenate, reverse and slice a string?

```
        # Reverse string
# Using a while loop

str = "JavaTpoint" #  string variable
print ("The original string  is : ",str)
reverse_String = ""  # Empty String
count = len(str) # Find length of a string and save in count variable
while count > 0:
    reverse_String += str[ count - 1 ] # save the value of str[count-1] in reverseString
  count = count - 1 # decrement index
print ("The reversed string using a while loop is : ",reverse_String)# reversed string
```

iii) Why is Python a popular programming language?

The python language is one of the most accessible programming languages available because it has simplified syntax and not complicated, which gives more emphasis on natural language. Due to its ease of learning and usage, python codes can be easily written and executed much faster than other programming languages.

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

1. Pyramid. Another open-source Python framework on our list is Pyramid. ...
2. TurboGears. TurboGears is an open-source, data-driven, full-stack Python framework. ...
3. Web2py. Web2py is a highly scalable, open-source full-stack Python framework. ...
4. CherryPy. ...
5. Flask. ...
6. Sanic.

v) Full form of WSGI?

A **Web Server Gateway Interface** (WSGI) server implements the web server side of the WSGI interface for running Python web applications.