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Consider a list (list = []).

You can perform the following commands:

- **insert i e: Insert integer at position.**
- **print: Print the list.**
- **remove e: Delete the first occurrence of integer.**
- **append e: Insert integer at the end of the list.**
- **sort: Sort the list.**
- **pop: Pop the last element from the list.**
- **reverse: Reverse the list.**

Initialize your list and read in the value followed by lines of commands where each command will be of the types listed above. Iterate through each command in order and perform the corresponding operation on your list.

```
N = int(input())
lists = []
for i in range(N):
  a = list(map(str,input().split( )))
  lists.append(a)
arr = []
for x in lists:
  if x[0] == "insert":
    i = int(x[1])
    e = int(x[2])
    arr.insert(i,e)
  elif x[0] == "print":
    print(arr)
  elif x[0] == "remove":
    e = int(x[1])
    arr.remove(e)
  elif x[0] == "append":
    e = int(x[1])
    arr.append(e)
  elif x[0] == "sort":
    arr.sort()
  elif x[0] == "pop":
    arr.pop()
  elif x[0] == "reverse":
    arr.reverse()
```

```
21
insert 0 7
insert 1 4
```

```
insert 2 8
insert 3 6
print
remove 8
remove 4
print
append 3
append 12
print
sort
print
reverse
print
pop
pop
print
append 1
append 15
print
[7, 4, 8, 6]
[7, 6]
[7, 6, 3, 12]
[3, 6, 7, 12]
[12, 7, 6, 3]
[12, 7]
[12, 7, 1, 15]
```

Write a Calculator Program in Python.

```
def add(P, Q):
 return P + Q
def subtract(P, Q):
 return P - Q
def multiply(P, Q):
 return P * Q
def divide(P, Q):
 return P / Q

while(True):
  print ("Select the operation given below.")
  print ("1. Add")
  print ("2. Subtract")
  print ("3. Multiply")
  print ("4. Divide")
  print ("5. Quit")
  choice = input("Enter the operation: ")
  if(choice == '5'):
    break
  num_1 = int (input ("Enter First number: "))
  num_2 = int (input ("Enter the second number: "))
```

```
  if choice == '1':
    print (num_1, " + ", num_2, " = ", add(num_1, num_2))
  elif choice == '2':
    print (num_1, " - ", num_2, " = ", subtract(num_1, num_2))
  elif choice == '3':
    print (num_1, " * ", num_2, " = ", multiply(num_1, num_2))
  elif choice == '4':
    print (num_1, " / ", num_2, " = ", divide(num_1, num_2))
```

```
Select the operation given below.
1. Add
2. Subtract
3. Multiply
4. Divide
5. Quit
Enter the operation: 1
Enter First number: 4
Enter the second number: 6
4  +  6  =  10
Select the operation given below.
1. Add
2. Subtract
3. Multiply
4. Divide
5. Quit
Enter the operation: 2
Enter First number: 8
Enter the second number: 5
8  -  5  =  3
Select the operation given below.
1. Add
2. Subtract
3. Multiply
4. Divide
5. Quit
Enter the operation: 3
Enter First number: 7
Enter the second number: 2
7  *  2  =  14
Select the operation given below.
1. Add
2. Subtract
3. Multiply
4. Divide
5. Quit
Enter the operation: 4
Enter First number: 8
Enter the second number: 2
8  /  2  =  4.0
Select the operation given below.
```

```
1. Add
2. Subtract
3. Multiply
4. Divide
5. Quit
Enter the operation: 5
```

Concatenate 2 strings.

```
s1 = "Hello "
s2 = "World"
print(s1 + s2)
```

```
Hello World
```

Reverse a string.

```
s1 = "Hello World"
s1 = s1[::-1]
print(s1)
```

```
dlroW olleH
```

Slice a string.

```
s1 = "Hello World"
print(s1[4:10])
```

```
o Worl
```

Why is Python a popular programming language?

- It has simplified syntax and not complicated, which gives more emphasis on natural language.
- Python is a scripted, object oriented and interpreted language.
- It can be used for web development, app development, and data visualization.
- It is also used in fields of Machine Learning and Artificial Intelligence.

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

- Django
- Web2Py
- Flask
- Bottle
- Gork
- CherryPy

Full form of WSGI?

The Web Server Gateway Interface.