

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

1. `insert i e`: Insert integer  $e$  at position  $i$ .
2. `print`: Print the list.
3. `remove e`: Delete the first occurrence of integer  $e$ .
4. `append e`: Insert integer  $e$  at the end of the list.
5. `sort`: Sort the list.
6. `pop`: Pop the last element from the list.
7. `reverse`: Reverse the list.

Initialize your list and read in the value of  $n$  followed by  $n$  lines of commands where each command will be of the 7 types listed above. Iterate through each command in order and perform the corresponding operation on your list.

## Input Format

The first line contains an integer,  $n$ , denoting the number of commands.

Each line  $i$  of the  $n$  subsequent lines contains one of the commands described above.

## Constraints

- The elements added to the list must be *integers*.

## Output Format

For each command of type `print`, print the list on a new line.

## Sample Input

```
12
insert 0 5
insert 1 10
insert 0 6
print
remove 6
append 9
append 1
sort
print
pop
reverse
print
```

## Sample Output

```
[6, 5, 10]
[1, 5, 9, 10]
[9, 5, 1]
```