

<https://www.hackerrank.com/challenges/py-set-discard-remove-pop/problem?isFullScreen=false>

```
n = int(input())
s = set(map(int, input().split()))
N=int(input())
for i in range(N):
    cmd=input().split() # "remove 9".split() ==>["remove","9"]
    if cmd[0]=="remove":
        s.remove(int(cmd[1]))
    elif cmd[0]=="discard":
        s.discard(int(cmd[1]))
    elif cmd[0]=="pop":
        s.pop()

print(sum(s))
```

**Example:**

```
list1=[10,20,10,30,10,20,40,50,50,40,20,60]
set1=set(list1)
list2=list(set1)
list2.sort()
for value in list2:
    c=list1.count(value)
    print(c,value)
```

```
# output
# 3 10
# 3 20
# 1 30
# 2 40
# 2 50
# 1 60
```

**Example:**

```
# str1="abcababdc"
```

# output: 3a3b2c1d

```
str1="abcbabdc"  
set1=set(str1) # {"a","b","c","d"}  
list1=list(set1)  
list1.sort()  
str2=""  
for ch in list1:  
    c=str1.count(ch)  
    str2=str2+str(c)+ch  
  
print(str2)
```

**Output:**  
3a3b2c1d

## **Set Operations**