**.remove(x)**

This operation removes element  from the set.  
If element  does not exist, it raises a KeyError.  
The *.remove(x)* operation returns None.

**Example**

>>> s = set([1, 2, 3, 4, 5, 6, 7, 8, 9])

>>> s.remove(5)

>>> print s

set([1, 2, 3, 4, 6, 7, 8, 9])

>>> print s.remove(4)

None

>>> print s

set([1, 2, 3, 6, 7, 8, 9])

>>> s.remove(0)

KeyError: 0

**.discard(x)**

This operation also removes element  from the set.  
If element  does not exist, it **does not** raise a KeyError.  
The *.discard(x)* operation returns None.

**Example**

>>> s = set([1, 2, 3, 4, 5, 6, 7, 8, 9])

>>> s.discard(5)

>>> print s

set([1, 2, 3, 4, 6, 7, 8, 9])

>>> print s.discard(4)

None

>>> print s

set([1, 2, 3, 6, 7, 8, 9])

>>> s.discard(0)

>>> print s

set([1, 2, 3, 6, 7, 8, 9])

**.pop()**

This operation removes and return an arbitrary element from the set.  
If there are no elements to remove, it raises a KeyError.

**Example**

>>> s = set([1])

>>> print s.pop()

1

>>> print s

set([])

>>> print s.pop()

KeyError: pop from an empty set

**Task**

You have a non-empty set , and you have to execute  commands given in  lines.

The commands will be *pop, remove* and *discard*.

**Input Format**

The first line contains integer , the number of elements in the set .  
The second line contains  space separated elements of set . All of the elements are non-negative integers, less than or equal to 9.  
The third line contains integer , the number of commands.  
The next  lines contains either *pop, remove* and/or *discard* commands followed by their associated value.

**Constraints**

**Output Format**

Print the sum of the elements of set  on a single line.

**Sample Input**

9

1 2 3 4 5 6 7 8 9

10

pop

remove 9

discard 9

discard 8

remove 7

pop

discard 6

remove 5

pop

discard 5

**Sample Output**

4

**Explanation**

After completing these 10 operations on the set, we get *set*. Hence, the sum is 4.

**Note**: Convert the elements of set *s* to *integers* while you are assigning them. To ensure the proper input of the set, we have added the first two lines of code to the editor.