competitive programming with python

Examples

Basic tips and tricks

If you want take an integer as input, then

```
n = int(raw_input())
```

As raw_input() always takes string as input and return it. So we have to convert it to int using **int** function.

If you have list of data to input like 1 2 3 4 5 6, then we can simply use

```
numbers = map(int, raw_input().split())
```

It is very useful tricks as many problem you have to take such input. Here **raw_input** take the whole line as a string then split the number. Split numbers are all string type thats why we have to convert it using **int** if you want int number for further calculation.

Swapping two variable:

```
a,b=2,3
a, b = b, a
# output: a=3,b=2
```

Sorting a list of data:

```
a = [3,2,4,1,5,1]
a = sorted(a)
# output: [1, 1, 2, 3, 4, 5]
```

You often need a unique data of list, then you can use python builtin set function,

```
a = [3,2,4,1,5,1]
a = list(set(a))
# output: [1, 2, 3, 4, 5]
```

In python string type is immutable so you can not change it after assign. So If you want to use string operation on a string you should convert it first a list of characters,

```
s = "hello"
character_list = list(s)
del character_list[0]
s = ''.join(character_list)
# output: ello
```

Slicing operation:

```
a = [2,3,1,5]

b = a[1:]
# output: [3, 1, 5]

b = a[:2]
# output: [2, 3]

b = a[:]
# output: [2,3,1,5]

b = a[1:3]
# output: [3, 1]
```

Syntax

Parameters

Remarks