

## 394'- Decode String

input string = "3[a2[c]]d2[t]"

Integers can be range [1, 300]

- (1) Push in stack until you see ']'

3	[	a	2	[	c
---	---	---	---	---	---

- (2) When you see ']'

pop until you see '[' and pop '[' as well.

Put the result of popped elements in a string.

in the same order as they appear in the stack.

For example

p	q	r
---	---	---

string = "pqr" not "rqp" X

So in above example we have

3	[	a	2
---	---	---	---

string = "c"

pop the elements from the stack until the popped element is a integer.

...	1	0	0
-----	---	---	---

→ ~~def~~ num = 100

multiply number with the string

string = 2 \* "c"  
= "cc"

← append it to the stack

3	[	a
---	---	---

3	[	a	c	c
---	---	---	---	---

- (3) Repeat the process until the end of input string.

→ Return the string in the stack.