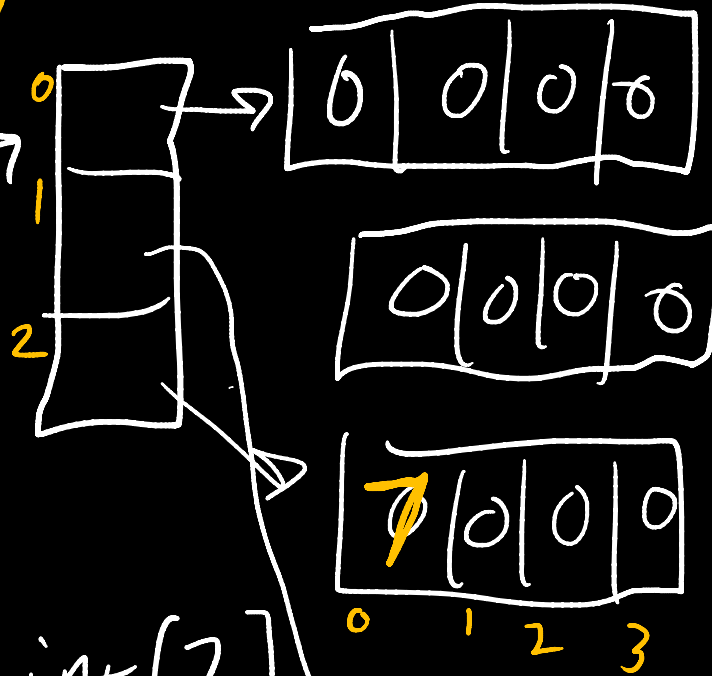
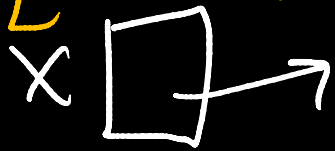
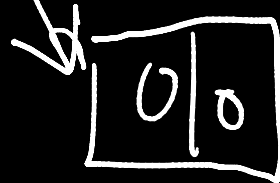


`int[][] x = new int[3][4];`

`x[2][0] = 7`



`x[1] = new int[2]`



$\text{int}[][] x = \dots [x][y]$

how many elements does  $x$  have?

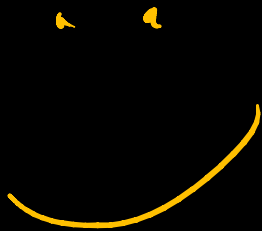
→  $x.length$

while are values, count

•  $x.y$

length of each row  $\Leftarrow$  add in for

$x.length * x[0].length$  (rectangular) <sup>loop</sup>



U L 7 L J  
U y B O



String [ ] [ ] [ ] [ ] [ ] x

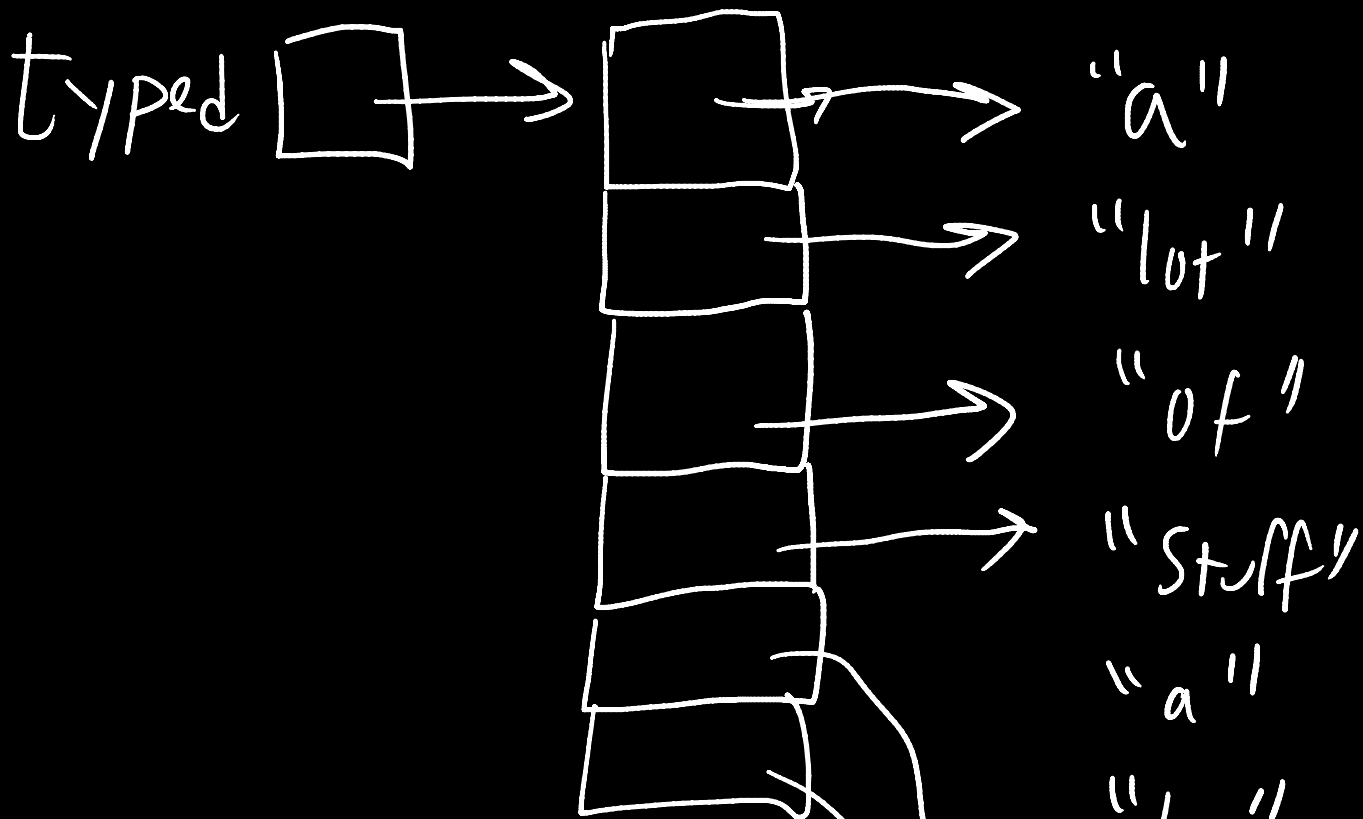
...

x [3] [5] = new String ("123");

ArrayList<String> a = new

String[] b = new String[s]     ArrayList<String> ()

a.add("hi")



```
typed.add(typed + "");
```

"[a, lot, of, stuff, more]"