

Lab 2, Tasks 1 and 4

Task 1

1)

line of code	a	t	s
<code>s = 'cs111'</code>	'cs111'		
<code>t = 'is amazing!'</code>	'cs111'	'is amazing!'	
<code>u = s[1] + t[-4:]</code>	'cs111'	'is amazing!'	'sing!'
<code>s = s[:2] + (t[-1]*2)</code>	'cs!!'	'is amazing!'	'sing!'
<code>t = t[1:-2:2]</code>	'cs!!'	'saai'	'sing!'
<code>s[::-2]</code>	'cs!!'	'saai'	'sing!'

2) **output:**

```
cs!! saai sing!
```

6) To see the effect of the skip-slicing line (the final line in the table), change that line to:

```
s = s[ ::-2]
```

Task 4

a	b	c
5	3	
10	3	
10	3	13
10	3	6

Notes:

- `c // 2` performs **integer** division, so we get 6 and **not** 6.5
- We don't execute the block associated with the second `elif`, even though `b == 3` is true. That's because the `if-elif-elif-else` is a single four-way decision, and we never execute more than one block in a multi-way decision.

Because the initial `if` condition is true, we execute its block and we don't even look at the `elif` conditions. Rather, we skip to the statement that comes after the multi-way decision, which in this case is the second `if` statement.