Solution Review: Reverse a List

This lesson will explain how to reverse a list in python using for loop.
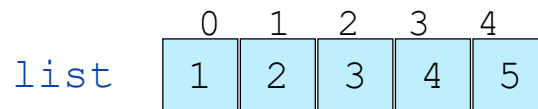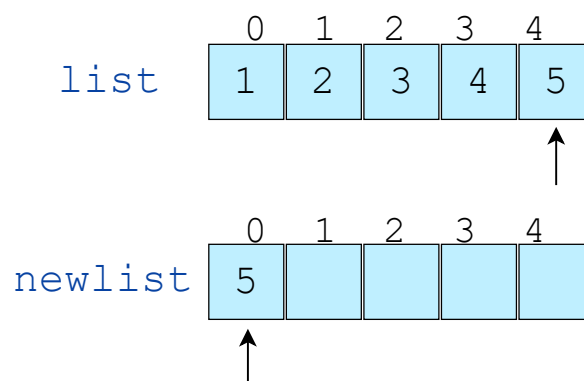
Solution Review: Use `for` loop

- Calculate the length of the list using the `len()` function.
- Create a new list.
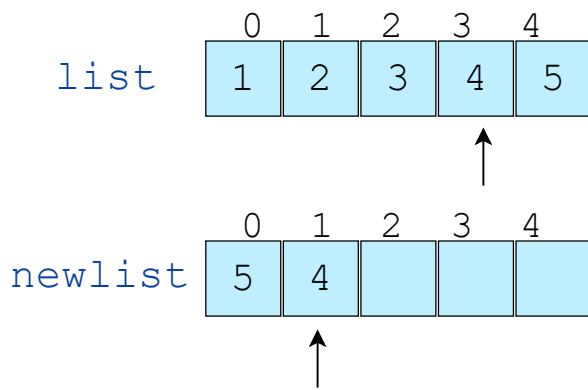- Run a backward loop starting from len to index 0.
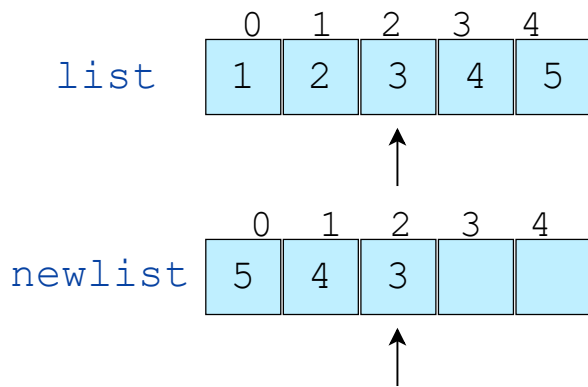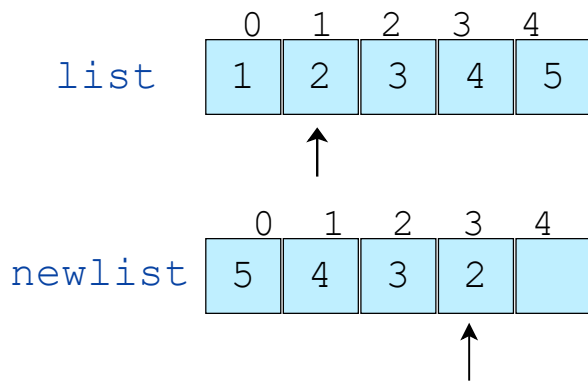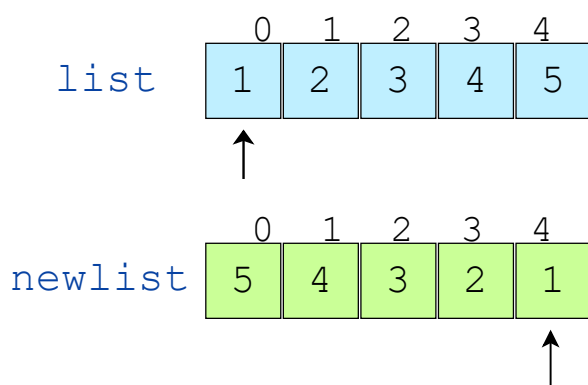
The following illustration makes it clear.

list

0	1	2	3	4
1	2	3	4	5

newlist

0	1	2	3	4
5	4			

list

0	1	2	3	4
1	2	3	4	5

newlist

0	1	2	3	4
5	4	3		

list

0	1	2	3	4
1	2	3	4	5

newlist

0	1	2	3	4
5	4	3	2	

list

0	1	2	3	4
1	2	3	4	5

newlist

0	1	2	3	4
5	4	3	2	1

The following python code helps to reverse a list using loop.

```python
def reverse(list):
    length = len(list)
    s = length

    new_list = [None]*length

    for item in list:
        s = s - 1
        new_list[s] = item
    return new_list

list=[1, 2, 3, 4, 5]
print(reverse(list))
```

Let's move on to the next problem.