

1. Fill the missing pieces

Fill the _____ parts of the code below.

```
In [1]: # Let's create an empty list
my_list = []

# Let's add some values
my_list.append('Python')
my_list.append('is ok')
my_list.append('sometimes')

# Let's remove 'sometimes'
my_list.remove('sometimes')

# Let's change the second item
my_list[1] = 'is neat'
```

```
In [2]: # Let's verify that it's correct
assert my_list == ['Python', 'is neat']
```

2. Create a new list without modifying the original one

```
In [16]: original = ['I', 'am', 'learning', 'hacking', 'in']
```

```
In [17]: # Your implementation here
modified = original.copy()

modified.append('Python')

modified[3] = 'lists'
```

```
In [18]: modified
```

```
Out[18]: ['I', 'am', 'learning', 'lists', 'in', 'Python']
```

```
In [19]: original
```

```
Out[19]: ['I', 'am', 'learning', 'hacking', 'in']
```

```
In [20]: assert original == ['I', 'am', 'learning', 'hacking', 'in']
assert modified == ['I', 'am', 'learning', 'lists', 'in', 'Python']
```

3. Create a merged sorted list

```
In [21]: list1 = [6, 12, 5]
```

```
list2 = [6.2, 0, 14, 1]
list3 = [0.9]
```

```
In [27]: # Your implementation here
my_list = list1 + list2 + list3

my_list.sort(reverse = True)

my_list
```

```
Out[27]: [14, 12, 6.2, 6, 5, 1, 0.9, 0]
```

```
In [28]: print(my_list)
assert my_list == [14, 12, 6.2, 6, 5, 1, 0.9, 0]

[14, 12, 6.2, 6, 5, 1, 0.9, 0]
```

```
In [ ]:
```