Len's Slice

You work at Len's Slice, a new pizza joint in the neighborhood. You are going to use your knowledge of Python lists to organize some of your sales data.

Tasks

14/14 Complete

Mark the tasks as complete by checking them off

Make Some Pizzas

1.

To keep track of the kinds of pizzas you sell, create a list called `toppings` that holds the following:

- `"pepperoni"`
- `"pineapple"`
- `"cheese"`
- `"sausage"`
- `"olives"`
- `"anchovies"`
- `"mushrooms"`

Hint

It should look something like:

```
toppings = ["pepperoni", "pineapple", "cheese", "sausage", "olives", "anchovies", "mushrooms"]
```

2.

To keep track of how much each kind of pizza slice costs, create a list called `prices` that holds the following integer values:

- `2`
- `6`
- `1`
- `3`
- `2`
- `7`
- `2`

Hint

You don't need the quotes when you are dealing with integers:

```
prices = [2, 6, 1, 3, 2, 7, 2]
```

3.

Your boss wants you to do some research on $2 slices.

Count the number of occurrences of `2` in the `prices` list, and store the result in a variable called `num_two_dollar_slices`. Print it out.

Hint

You can use `.count` to find the number of occurrences of a value in a list:

```
my_list = ["a", "a", "b"]

number_of_as = my_list.count("a")
# number_of_as is 2
```

4.

Find the length of the `toppings` list and store it in a variable called `num_pizzas`.

Hint

You can use `len()` to find the length of a list:

```
len(toppings)
```

5.

Print the string `We sell [num_pizzas] different kinds of pizza!`, where `[num_pizzas]` represents the value of our variable `num_pizzas`.

Hint

To add a variable to a string, you can use the syntax:

```
"My age is " + str(my_age)
```

Note: You have to cast the number as a string before you add it to another string!

The output should look like:

```
We sell 7 different kinds of pizza!
```

6.

Use the existing data about the pizza toppings and prices to create a new two-dimensional list called `pizza_and_prices`.

Each sublist in `pizza_and_prices` should have one pizza topping and an associated price.

Price	Topping
2	"pepperoni"
6	"pineapple"
1	"cheese"
3	"sausage"
2	"olives"
7	"anchovies"
2	"mushrooms"

For this new list make sure the prices come before the topping name like so:

```
[price, topping_name]
```

Note: You don't need to use your original `toppings` and `prices` lists in this exercise. Create a new two-dimensional list from scratch.

Hint

Your first sublist in the two-dimensional list would look like this:

```
[2, "pepperoni"]
```

7.

Print `pizza_and_prices`.

Does it look the way you expect?

Hint

The output should look like:

```
[[2, 'pepperoni'], [6, 'pineapple'], [1, 'cheese'], [3, 'sausage'],
[2, 'olives'], [7, 'anchovies'], [2, 'mushrooms']]
```

Sorting and Slicing Pizzas

8.

Sort `pizza_and_prices` so that the pizzas are in the order of increasing price (ascending).

Hint

You can sort a list from low to high by using `.sort()`:

```
my_list.sort()
```

When sorting a two-dimensional list using `.sort()`, the list by default will be sorted by the first element in each sublist. In this case, this will mean it is sorted by the price.

9.

Store the first element of `pizza_and_prices` in a variable called `cheapest_pizza`.

Hint

To get an element of a list, use the syntax `list[n]`, where `n` is the index of the item you want to get. Remember that list indices start at zero!

```
second_item = your_list[1]
```

10.

A man walks into the pizza store and shouts "I will have your MOST EXPENSIVE pizza!"

Get the last item of the `pizza_and_prices` list and store it in a variable called `priciest_pizza`.

Hint

To get the last element of a list, use the syntax `list[-1]`

```
last_item = your_list[-1]
```

11.

It looks like the most expensive pizza from the previous step was our very last `"anchovies"` slice. Remove it from our `pizza_and_prices` list since the man bought the last slice.

Hint

To remove the last element of a list, use the `.pop()` method.

12.

Since there is no longer an `"anchovies"` pizza, you want to add a new topping called `"peppers"` to keep your customers excited about new toppings. Here is what your new topping looks like:

```
[2.5, "peppers"]
```

Add the new peppers pizza topping to our list `pizza_and_prices`.

Note: Make sure to position it relative to the rest of the sorted data in `pizza_and_prices`, otherwise our data will not be correctly sorted anymore!

Hint

Since the new pizza has a price of `2.5`, it should come after `[2, "pepperoni"]` but before `[3, "sausage"]`.

You can use the `.insert()` method to insert an element at a specific index.

13.

Three mice walk into the store. They don't have much money (they're mice), but they do each want different pizzas.

Slice the `pizza_and_prices` list and store the 3 lowest cost pizzas in a list called `three_cheapest`.

Hint

To get the first `n` items of a list, use `list[:n]`. For example:

```
new_list = my_list[:2]
```

would store the first two items of `my_list` in `new_list`.

14.

Great job! The mice are very pleased and will be leaving you a 5-star review.

Print the `three_cheapest` list.

script.py

```
# Your code below:
toppings = ["pepperoni", "pineapple", "cheese", "sausage", "olives", "anchovies",
 "mushorooms"]

prices = [2, 6, 1, 3, 2, 7, 2]

num_two_dollar_slices = prices.count(2)
print(num_two_dollar_slices)

num_pizzas = len(toppings)

print("We sell " + str(num_pizzas) + " different kinds of pizza!")

pizza_and_prices = [[2, "pepperoni"], [6, "pineapple"], [1, "cheese"], [3, "sausa
ge"], [2, "olives"], [7, "anchovies"], [2, "mushrooms"]]

print(pizza_and_prices)

pizza_and_prices.sort()
print(pizza_and_prices)

cheapest_pizza = pizza_and_prices[0]
print(cheapest_pizza)

priciest_pizza = pizza_and_prices[-1]
print(priciest_pizza)
pizza_and_prices.pop()
print(pizza_and_prices)

pizza_and_prices.insert(4, [2.5, "peppers"])
print(pizza_and_prices)

three_cheapest = pizza_and_prices[:3]
print(three_cheapest)
```

```
3
We sell 7 different kinds of pizza!
[[2, 'pepperoni'], [6, 'pineapple'], [1, 'cheese'], [3,
'sausage'], [2, 'olives'], [7, 'anchovies'], [2,
'mushrooms']]
[[1, 'cheese'], [2, 'mushrooms'], [2, 'olives'], [2,
'pepperoni'], [3, 'sausage'], [6, 'pineapple'], [7,
'anchovies']]
[1, 'cheese']
[7, 'anchovies']
[[1, 'cheese'], [2, 'mushrooms'], [2, 'olives'], [2,
'pepperoni'], [3, 'sausage'], [6, 'pineapple']]
[[1, 'cheese'], [2, 'mushrooms'], [2, 'olives'], [2,
'pepperoni'], [2.5, 'peppers'], [3, 'sausage'], [6,
'pineapple']]
[[1, 'cheese'], [2, 'mushrooms'], [2, 'olives']]
```
