

Lists: Exercises

Q1) Given the list of foods below, output:

1. The first item in the list.
2. The third item in the list.
3. The last item in the list.
4. The first three items in the list.
5. The last three items in the list.
6. The last item in the sublist.

```
foods = [  
    "orange",  
    "apple",  
    "banana",  
    "strawberry",  
    "grape",  
    "blueberry",  
    ["carrot", "cauliflower", "pumpkin"],  
    "passionfruit",  
    "mango",  
    "kiwifruit"  
]
```

Output
orange banana kiwifruit ['orange', 'apple', 'banana'] ['passionfruit', 'mango', 'kiwifruit'] pumpkin

Q2) Format and print the following list:

```
mailing_list = [  
    ["Roary", "roary@moth.catchers"],  
    ["Remus", "remus@kapers.dog"],  
    ["Prince Thomas of Whitepaw", "hrh.thomas@royalty.wp"],  
    ["Biscuit", "biscuit@whippies.park"],  
    ["Rory", "rory@whippies.park"],  
]
```

Output
Roary: roary@moth.catchers Remus: remus@kapers.dog Prince Thomas of Whitepaw: hrh.thomas@royalty.wp Biscuit: biscuit@whippies.park Rory: rory@whippies.park

Q3) Ask the user for three names, append them to a list, then print the list.

Input	Output
Izzy Archie Boston	["Izzy", "Archie", "Boston"]

Q4)

1. Ask the user to enter a string.
2. Split the string into a list, divided by spaces (hint: `yourlist.split()` will be useful).
3. Convert the string to a list, where each character is an item in the list (hint: `list(yourlist)` will be useful).
4. For each list: output the length of the list, and the list itself.

Input	Output
this is a string	4 ['this', 'is', 'a', 'string'] 16 ['t', 'h', 'i', 's', ' ', 'i', 's', ' ', 'a', ' ', 's', 't', 'r', 'i', 'n', 'g']
what a lovely day!	4 ['what', 'a', 'lovely', 'day!'] 18 ['w', 'h', 'a', 't', ' ', 'a', ' ', 'l', 'o', 'v', 'e', 'l', 'y', ' ', 'd', 'a', 'y', '!']