Exercise 2: Concatenate two lists index-wise

Write a program to add two lists index-wise. Create a new list that contains the 0th index item from both the list, then the 1st index item, and so on till the last element. any leftover items will get added at the end of the new list.

Given:

```
list1 = ["M", "na", "i", "Ke"]
list2 = ["y", "me", "s", "lly"]
```

Expected output:

```
['My', 'name', 'is', 'Kelly']
```

Exercise 6: Remove empty strings from the list of strings

```
list1 = ["Mike", "", "Emma", "Kelly", "", "Brad"]
```

Expected output:

```
["Mike", "Emma", "Kelly", "Brad"]
```

+ Show Hint

Use a `filter()` function to remove the `None` / empty type from the list

Exercise 8: Extend nested list by adding the sublist

You have given a nested list. Write a program to extend it by adding the sublist `["h", "i", "j"]` in such a way that it will look like the following list.

Given List:

```
list1 = ["a", "b", ["c", ["d", "e", ["f", "g"], "k"], "l"], "m", "n"]

# sub list to add
sub_list = ["h", "i", "j"]
```

Expected Output:

```
['a', 'b', ['c', ['d', 'e', ['f', 'g', 'h', 'i', 'j'], 'k'], 'l'], 'm', 'n']
```

+ Show Hint

The given list is a nested list. Use indexing to locate the specified sublist item, then use the `extend()` method to add new items after it.