

# SUNY Korea - Francois Rameau

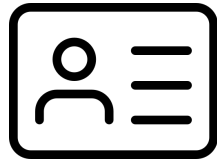
# GitHub Classroom



## Lab 4 - While & List

# Contact List Project

Today, you will create a small program to manage a contact list. Each Contact will be characterized by:



Name



Phone Number

**You will create various functions to:**



**1. Create your  
contact list**



**2. Display all  
the names in  
the terminal**



**3. Search the  
number of a  
specific contact**

## Task 1: Create name and number list

declare a function `create_contact_list()` which will allow the user to store its contact's names and phone numbers in two lists.

You can enter as many contacts as you want until the user types the flag “!done” as a name (How would you stop the while loop?? Break? Return?)

### Function description

1. Initializes two empty lists, `contacts` for names and `phone_nb` for phone numbers.
2. Repeatedly prompts the user for a contact's name and phone number with a WHILE loop
3. Add each new name to `contacts` and each new number to `phone_nb`.
4. Continues this process until the user enters “!done” as a name, signaling the end of input.
5. Returns the `contacts` and `phone_nb` lists

```
contacts → ["Alice", "Bob", "Joe"]  
phone_nb → ["010-2299-8732", "010-4333-2130", "010-5492-6328"]
```

## Task 2: Display all names

You will now create a simple function  
`display_names(contacts)` that will print all the names in your  
contact list

### Function description

1. Use a while loop to iterate through each element (name) in your contact list and print the names (you might need to update an index)
2. Make sure to stop the loop when you have printed all the names
3. This function is void, it does not return anything



*Example of what can be  
displayed in the terminal:*

```
Alice  
Bob  
Joe
```

## Task 3: Search the contact



Finally, create a function `search_number` that searches for a contact's name in your list and displays the corresponding phone number.

**This function accepts three parameters:** `contacts` (the list of names), `phone_nb` (the list of phone numbers), and `query_name` (the name you're searching for as a string).

### Function description

1. Use a while loop to iterate through each element (name) in your contact list, if one of these name is the same as the queried one then display the corresponding phone number
2. Remember that the index of the names and their respective phone numbers are the same
3. After you display the phone number, break the loop!

```
search_number(contacts, numbers, "Joe")
```

```
→ 010-5492-6328
```