

Lab 4: While & Lists

SUNY Korea - Francois Rameau

267 688-8390	215 381-2330
267 244-4297	267 331-0174
5 567-2500	215 361-3649
248-4357	215 922-2293
7612	215 665-3990
1070	267 773-8430
30	215 413-0813
5	215 281-3690
Tristate Computech Inc	215 487-3811
121 S 22 St Phila.	215 922-6880
Tykal Technologies	215 627-8850
128 Leverington Ave Phila.	215 545-1170
Ulrich Mike	215 291-930
300 Wellington St Phila.	
ban Computer Solutions	
0 N Broad St Phila.	

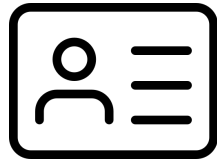
GitHub Classroom



Lab - 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
```