

# Module 00 Problem

## C++ Software Training in CORA (COmputational Robotics and Autonomy)

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### Exercise 00: Welcome to GitHub

Let's explore the GitHub!

1. Do you have a GitHub account? If not, create one.
2. Make your own repository in GitHub.
3. Clone repository to your local computer.
4. Make branch (dev\_{your\_name}) and checkout to new branch.
5. Create a README.md file.
6. Fill in the information about yourself. (name, department)
7. Add at least one picture or video.
8. Save the changes.
9. Upload difference to online GitHub server. (Add, Commit, Push)
10. Create a pull request to the main branch.
11. Do you know what you just did?

### Exercise 01: Do you know string?

How deeply do you know about C++? Let's start from the beginning again. The first one is just for using string.

1. Make the program as follows this:
  - A. Use simple string class
  - B. To convert UPPER CASE
  - C. To convert LOWER CASE
2. Use string class's functions
  - A. substr, append, insert, replace, erase, etc..
3. The program gets two arguments:  
./convert {command} {string}
  - A. ex) ./convert up I'm the one!
    - i. output: I'M THE ONE!
  - B. ex) ./convert down I'm A SMall man
    - i. output: i'm a small man

## Exercise 02: Old PhoneBook

Our older computers have no graphics. They only could use characters on the black screen. Can you imagine? No graphics, No mouse. You don't need to imagine it. Because now you will make yourself!

You have to make a Phonebook application. Follow the details:

User can use these commands. (Try to make good use of the class)

1. ADD
  - A. Add new contact in phonebook
  - B. Require contents
    - i. Name
    - ii. Phone number(unique)
    - iii. Nickname
2. SEARCH
  - A. List up the contacts with index
  - B. User choose index display details of the contact.
  - C. If user want can bookmark the contact.
3. REMOVE
  - A. Remove a contact with an index or a phone number.
4. BOOKMARK
  - A. List up the bookmarked contact
5. EXIT
  - A. Shut down the program

## Evaluation Form

Fill in Evaluation Form Module00.

You need to collect 2 feedback from 2 peers from other than your own team.

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## References

<https://github.com/SEA-ME/SEA-ME-warm-up/blob/main/Modules/Module00.md>

<https://github.com/MC00614/SEA-ME-warm-up/tree/main/Module00>