

# Experiment Report On PA0

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## (1) Experiment result

I've finished all the missions in PA0 with help from teaching assistants and websites and the versatile manual.

## (2) A brief resume of experiment procedure

First of all, I got to read the PA material several times and I decided to go to install a docker from the official website on my 64-bits Ubuntu(version number 16.04). Since the system has no Chinese typewriting because of my choice when installing, I have to write this report in English and pardon me for my poor wording and vocabulary.

When downloading the docker from the website, I used command lines to do the task in my dormitory. However, the "sudo apt-get install \*" just didn't work. I discovered that each time it returned an error information of "hash number mismatch" which occurs at different steps. I searched the internet and found a possible explanation to this: our network artificially blocked some websites out and therefore some websites got changed hash number, thus causing the error. I opened the software&updates and changed the default dateway to ftsj( belong to Shanghai Jiaotong University?), and things went off.

Things went on well as I followed the steps from the PA reading material and I learned vim in a better way with vimtutor (well I have to say that sometimes official documents do give a better illustration than most teaching blog on the Internet). The image is successfully installed and started, and I've managed to make configuraion of several editors just under command line interface! Well, this is amazing.

## (3) Conclusion and introspection

Well, since my time is limited, I've lacked many details in installing the docker and the image but I did have learned a lot. Doing such programming assignment requires not only our improving ability in coding and debugging, but our will and ability to get familiar with new environments and positively learning new things.

The screenshot shows a terminal window with a sidebar of application icons on the left. The main terminal area displays a series of commands and their outputs. It starts with a host terminal session where files Q1.docx, Q2.docx, and Q3.docx are copied from /home/lac/workspace to a Docker container named Lacomn@127.0.0.1. The container's IP is 127.0.0.1. The container session, titled 'Lacomn@938b150d354b: ~/ics2017', shows the user running 'make compile', which outputs a commit hash '161220062'. The user then runs 'ls', showing a directory listing with files like Q1.docx, Q2.docx, Q3.docx, README.md, init.sh, and directories nanos-lite, navy-apps, and nexus-am. The user then runs 'rm Q3.docx' and 'git status', which shows the repository is on branch 'pa0' and the working tree is clean. The user then runs 'ls' again, showing the directory listing after the file removal.

```
Terminal
[La@Mnapiion ~ Sun Sep 10 09:14]$ scp -P 20022 /home/lac/workspace/Q1.docx Lacomn@127.0.0.1:/home/Lacomn/ics2017
Lacomn@127.0.0.1's password:
100% 11KB 11.1KB/s 00:00
Q1.docx
[La@Mnapiion ~ Sun Sep 10 09:16]$ scp -P 20022 /home/lac/workspace/Q2.docx Lacomn@127.0.0.1:/home/Lacomn/ics2017
Lacomn@127.0.0.1's password:
100% 11KB 11.4KB/s 00:00
Q2.docx
[La@Mnapiion ~ Sun Sep 10 09:16]$ scp -P 20022 /home/lac/workspace/Q3.docx Lacomn@127.0.0.1:/home/Lacomn/ics2017
Lacomn@127.0.0.1's password:
100% 12KB 11.8KB/s 00:00
Q3.docx
[La@Mnapiion ~ Sun Sep 10 09:16]$ scp -P 20022 /home/lac/workspace/Q3.docx Lacomn@127.0.0.1:/home/Lacomn/ics2017
Lacomn@127.0.0.1's password:
100% 12KB 11.9KB/s 00:00
Q3.docx
[La@Mnapiion ~ Sun Sep 10 09:16]$

Lacomn@938b150d354b: ~/ics2017
Date: Sun Sep 10 12:55:05 2017 +0000

> compile
161220062
Lacomn
Lacomn@938b150d354b:~/ics2017$ cd ..
Lacomn@938b150d354b:~/ics2017$ ls
Makefile  Q2.docx  README.md  nanos-lite  nemu
Q1.docx  Q3.docx  init.sh    navy-apps   nexus-am
Lacomn@938b150d354b:~/ics2017$ vim Q1.docx
Lacomn@938b150d354b:~/ics2017$ git status
On branch pa0
nothing to commit, working tree clean
Lacomn@938b150d354b:~/ics2017$ ls
Makefile  Q2.docx  README.md  nanos-lite  nemu
Q1.docx  Q3.docx  init.sh    navy-apps   nexus-am
Lacomn@938b150d354b:~/ics2017$ rm Q3.docx
Lacomn@938b150d354b:~/ics2017$ ls
Makefile  Q2.docx  init.sh    navy-apps   nexus-am
Q1.docx  README.md  nanos-lite  nemu
Lacomn@938b150d354b:~/ics2017$ ls
Makefile  Q2.docx  README.md  nanos-lite  nemu
Q1.docx  Q3.docx  init.sh    navy-apps   nexus-am
Lacomn@938b150d354b:~/ics2017$
```

Besides, I've learned to save my files with caution. One time I run the make command in a wrong folder which staled all the files within ics2017 that I had to reclone the code from the github( yeah, I didn't apply the git to record the procedure at that time either). Think twice before you delete something--- I guess that's the best lesson I learned.

And read carefully and don't let your thoughts be limited by your own premises. I used to though that the file transportation between the docker and the host should be one-way and I just don't know why scp command didn't work when I'm in my docker. Well, not any more.