

# CS 307 – Operating Systems

## Fall 2019 - Homework 6

### Terminal commands on Ubuntu

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**Date Assigned:** 17.12.2019

**Due Date Time:** 23.12.2019 at 23:55 (sharp, according to server's time)

**Late Policy:** For every 10 minutes of late submission 1 point will be deducted. (Details at the end)

### Introduction

In this homework, you are going to install Ubuntu on your computer as a virtual operating system using the Virtual Box application. In addition, you will run some terminal commands, compile and run some codes that are provided. These codes will update/change some of the files within the folder and you will submit this as your homework.

### Project Description

The purpose of this homework is to improve your understanding of operating systems and command line tools. For this homework, you will do two things:

1. Install Ubuntu using Virtual Box.
2. Compile and run codes that we have provided in Ubuntu Terminal Application.

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### Installing Ubuntu

As mentioned before, you can follow the guide to install Ubuntu with Virtual Box from this link: <https://www.wikihow.com/Install-Ubuntu-on-VirtualBox>

When you are installing Ubuntu you will be asked to create an account and password for the operating system. **When prompted for a username you must use your SU-Email Username for this step.** This step will be crucial for your grading process. If you have already created an account with a different username then you can:

- a. Change the username from Ubuntu settings.
- b. Create another administrator user from Ubuntu settings.

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### Terminal & Codes

Attached to this homework you will find a compressed file that contains a folder with 3 different files in it:

1. A **.txt** file
2. A **.cpp** file
3. A **.py** file

**TXT File:** You won't be modifying this file. It will be modified by the two other codes

**CPP File:** You will compile and run this file first.

**PY File:** You will run this file after the cpp file.

## Flow of the homework

First, you must decompress the file we have provided in the assignment onto the desktop of the Ubuntu OS. Hence the folder will be at:

**/home/su-net-username/Desktop/CS307-201901-HW6.**

Secondly, you must open the terminal application within Ubuntu. The terminal application is actually the same thing you have seen, while using the **Flow Server**.

Thirdly, you must navigate to the **/CS307-201901-HW6** folder from the terminal application. Once you have reached this point you must follow these steps:

1. Compile the **.cpp** file using the **g++** commands.
2. Run the out file you have created from step 1.
3. Run the **.py** file. (*You must find help on the internet for this step*)
4. Close the terminal window.
5. Compress the edited **/CS307-201901-HW6** folder.
6. Submit as your homework.

## Submission Guides:

Solutions should be submitted in a zip/tar archive file. Please name your archive file as: **YourNameSurname\_ID\_hw6.zip (.tar)** and submit to **SUcourse**.

Note that, your system time and SUcourse server's time may not be synchronized so do not wait for last minute to submit your homework. Only the submissions in the SUcourse system will be graded. Other submissions, such as emailing to instructor or assistants, will not be graded.

## Late Policy:

Late submission is allowed. For every 10 minutes you are late, 1 point from your grade will be deducted. **Please do not ask for any relaxation.** Below you can find the table for the point deduction system:

Submission Time	Deduction points	Max Grade
23:56 - 00:05	1	99
00:06 - 00:15	2	98
00:16 - 00:25	3	97
00:26 - 00:35	4	96
00:36 - 00:45	5	95
...	...	...
15:56 - 16:05	97	3
16:06 - 16:15	98	2
16:16 - 16:25	99	1
16:26 - 16:35	100	0