

Homework 4

Quick Start Guide

- Install the latest version Virtualbox. Use installation package based on your operating system in the link below:
<https://www.virtualbox.org/wiki/Downloads>
- Install the “Extension Pack” according to your installed Virtualbox version with the same link.
- You can set your virtual machine disk by accessing File --> Preferences --> General --> Default Machine Folder.
- Import the file .ova to Virtualbox.
- Start imported operating system in Virtualbox.
- Login as “user” with password “sysprog2019”
- Hint : https://projects.ui.ac.id/projects/kuliahsysprog/wiki/Import_Virtual_Appliance

Part A : Bash Prompt

1. In this section , you need to customize your bash prompt. Here is the example customized bash prompt.



You can customize your bash prompt as you like, you dont need to make it similar with the example.

For this task, you need to make a script to customize your bash prompt. Explain what the script do to your bash prompt. After you success customize your bash prompt, try to close your bash prompt and open it again. Is it back to the default setting or not ? If it is back to default , how to make it permanent ? Explain it.

Save the script in **bash_prompt.sh** and write the report on **sysprog_pr4.pdf**

Part B : Scripting

1. Structure of file system consists of directory and file. Make a script that represent your file system structure as a tree. Here is the example of the structure :

```
Initial Directory = /home/dios/Music/PR4
> ...DIRECTORY_1
| ▶ ...SUB_DIR_1
| | ▶ ...SUB_SUB_DIR_1
| | ▶ ...SUB_SUB_DIR_2
| ▶ ...SUB_DIR_2
| ▶ ...SUB_DIR_3
| | ▶ ...SUB_SUB_DIR_1
> ...DIRECTORY_2
| ▶ ...SUB_DIR_1
| ▶ ...SUB_DIR_2
| | ▶ ...SUB_SUB_DIR_1
| | ▶ ...SUB_SUB_DIR_2
> ...DIRECTORY_3
> ...DIRECTORY_4
| ▶ ...SUB_DIR_1
| | ▶ ...SUB_SUB_DIR_1
| ▶ ...SUB_DIR_2
| | ▶ ...SUB_SUB_DIR_1
| | ▶ ...SUB_SUB_DIR_2
| | ▶ ...SUB_SUB_DIR_3
| ▶ ...SUB_DIR_3
| | ▶ ...SUB_SUB_DIR_1
| | ▶ ...SUB_SUB_DIR_2
Total directories = 23
```

At the end of the line, show total number of the directories.

Save the script in **tree_dir.sh** and write the report on **sysprog_pr4.pdf**

Part C : Regex

1. Create ReGex with this criteria :
 - a. Match with Dudut {...} Chuchu , but it is not match with Chuchu {...} Dudut
Example: It will match with **Dudut Dudutchu Chuchu**, but not with **Dudutan**
Dudut Chuchu. It also not match with **Dudut Chuchu**. The criteria of the ReGex should fulfill:
 - 1.) First word is Dudut
 - 2.) Last word is Chuchu
 - 3.) First character is Capitalize for Dudut and Chuchu.
2. Answer this questions :

- a. What is ReGex and explain what is used for.
- b. There are some special characters in ReGex, write minimum 5 special characters and what is the meaning of each special character.

Write the report on **sysprog_pr4.pdf**

Submission Format

1. Answer all these questions with the format you asked and wrap it in tar.gz format with format name **NPM_NAME_CLASS_HW4.tar.gz** (example: 0806444700_TONNY_A_HW1.tar.gz). For this assignment you need to submit **bash_prompt.sh**, **tree_dir.sh**, and **sysprog_pr4.pdf**. Add any additional files if needed.
2. If you collaborate with someone, please write your collaborator's name.
Plagiarism will be sanctioned with 0 score for this assignment.
3. Submit your answer via Scele.