**CT5052 Networks Operating Systems**

**Week 7 Workshop**

# Practice in using UNIX utilities:

1. Create the directory structure presented in the figure below. Use **mkdir** command and relative pathnames from your home directory. Try both: no option and **–p** option, for the command.

w7-1 1level3

2level3

W7

3level3

Your

home w7-2 4level3 directory()

1. Change to the **1level3** directory by one step using a relative pathname.
2. Practice in changing directories in your directory structure by one command using relative pathnames, e.g., from **1level3** to **2level3**, from **2level3** to **4level3**, from **4level3** to **W7**, etc. Use names of parent and child directories (‘**.’** and ‘**..’**) as well.
3. Change to **1level3** and create a text file by any tool (e.g., by **cat** or **cal** like last tutorial).
4. Copy this text file from **1level3** to **1level3** (with the name **file1**), **2level3**, and to **3level3** changing its name. Show that there are these files in corresponding directories.
5. Move this file to **4level3**. Show that there is this file in **4level3** and there is not in **1level3**.
6. Print the following texts each in one **echo** or

**printf** command:

# Hello! I can do it

* + **5 > (20: 8) < (30 \* 2)**
  + **Line 1 Line 2**

**a-b, A-B, –, +, <, >, #, $, %, &.**

1. Give the **ls** command (without options and with **a**, **d**, **g**, **l**, **R** options) in home directory, **w7**, **w7-1**, and **1level3** directories. Explain for yourself the results received.
2. Change to the **W7** directory. Remove the directory files **w7-2**, **3level-3**, **4level3** and all ordinary files in them. Use the option **–i** of the **rm** and **rmdir** commands. Show that there are not these ordinary and directory files in your file structure.
3. Change to **w7-1**.
   * Display access permissions for the file **file1**

in **1level3**.

* + Remove all access permissions for this file.
  + Display access permissions for this file.
  + Try to read this file using any utility (e.g.,

**cat**).

* + Try to write into this file using any utility (e.g., **cat** with the sign **>>** – *append*).
  + Add read and write access permissions for yourself for this file.
  + Display access permissions for this file.
  + Try to read this file using any utility.
  + Try to write into this file using any utility.

1. (Now,)
   * Display access permissions for **1level3**.
   * Remove all access permissions for the

**1level3** directory.

* + Display access permissions for **1level3**.
  + Try to read a file from **1level3** using any utility.
  + Try to put a file into **1level3** using any utility.
  + Try to search in **1level3** using any command (e.g., the **ls** command).
  + Add read, write, and execute access permissions for yourself for the **1level3** directory.
  + Display access permissions for **1level3**.
  + Try to read a file from **1level3** using any utility.
  + Try to put a file into **1level3** using any utility.
  + Try to search in **1level3** using any command (e.g., the **ls** command).