UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

IS1104 - Application Laboratory
Activity 7 - File Permissions

In this tutorial we are going to learn about file permissions.

Permission types

Read (r)- Read the content of the file or directory..
Write (w)- Write or modify the file or directory.
Execute (x)- Execute a file or view the content in the directory.
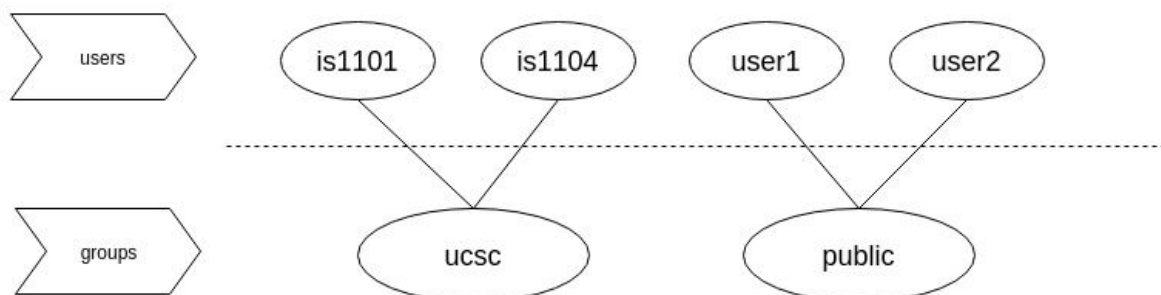
Permission groups

Owner - owner permissions apply only for the owner of the file or the directory.
Group - group permissions apply for the group that has been assigned for the directory or file.
All users - these permissions apply for all the users.

Activity 7

1. Create a user hierarchy as shown in the following figure.

2. Login to the terminal as user "is1104" and change your current working directory to "Documents". Create a directory structure as shown in the following directory tree.

```
`-- file_permission
   |-- is1101
   |  `-- main.c
   |-- is1104
   |  `-- laboratory.txt
   |-- myblog.txt
```

(include the hello world c program in the main.c file and add some data to the laboratory.txt and myblog.txt files as well.)

3. Goto the "file_premission" directory and identify the default permission assigned. (Hint : ls -l)
4. Change the permissions of files and directories as shown in the following table.

file/directory	user	group	permissions
myblog.txt	is1104	public	rw- r-- r--
is1104	is1104	ucsc	rwx r-x r-x
laboratory.txt	is1104	ucsc	rw- r-- r--
is1101	is1101	ucsc	rwx r-x r--
main.c	is1101	ucsc	rwx r-x r--

Answer the following questions and upload your answers to the UGVLE in pdf format.
1. What are the default permissions assigned to a directory and a file.
2. Who is the owner and the group of main.c file.
3. Perform the following tasks as "user1", "is1104" and "is1101" separately and mention in the report whether you execute each step, if not give the reasons.
   a. Read main.c
   b. Add print statement to main.c
   c. Compile and execute main.c
   d. List directory 'is1104'
   e. Change the current working directory to 'is1104'
   f. Create a new directory inside the 'is1104' directory as 'test_<username>'