CS1101 Worksheet02

Login to the system. Open a terminal. Create a directory called **Worksheet02** under your home directory. Change to that directory (using the **cd Worksheet02** command) and do all your work there. In particular open a file called **Worksheet02.txt** (using **gedit**) inside this directory (open gedit from the menu and save the initial empty file in the Worksheet02 directory before you do anything else) where you will write down the answers to all questions asked in this worksheet. At the end of the class, archive the directory **Worksheet02** (ask the TA for help with this) and upload to welearn. For the following questions, write down which Linux command you will issue at each stage in the file **Worksheet02.txt**. Note that you should, of course, carry out these commands at the same time, and check whether they work!

Warning : please strictly adhere to the instructions above – not doing so may affect your grades!

Q 1) Using a single command each create the following directory structure (under the directory **Worksheet02**) :
ABC > def>GHI

Q 2) Change directory to **GHI**. Staying here create an empty file in the directory **ABC** called **Myfile01.txt**. Copy this file to another directory **def**, with name **MyFile02.txt**. Again staying in directory, issue a command that will let you find out the permissions of the file **MyFile02.txt**. What are these permissions?

Q 3) Ch**an**ge to the directory **ABC**. Issue a series of commands that will, in succession, do the following to the file **Myfile01.txt** :

i. Add execute permission to the group.
ii. Remove read permission from others.
iii. Give the user execute permission.

What are the permissions of the file Myfile01.txt now?

Q 4) By issuing a single command (and staying in the directory **ABC**) change the permissions of the file **MyFile02.txt** to the following :

(a) Read, write and execute for the user. Verify that the permissions have been changed correctly by using a single command
(b) Read and execute for the group. Verify that the permissions have been changed correctly by using a single command
(c) no permissions for others. Verify that the permissions have been changed correctly by using a single command

Q 5) Return to the directory **Worksheet02**. Open gnuplot and plot the following curves:

(a) $\frac{\cos(x)}{1+x^2}$ with x running from -3π to $+3\pi$.

(b) $e^{-x^2/2}\cos^2\left(x-\frac{\pi}{3}\right)$ with x running from 0 to $+2\pi$

(c) $2-x-3x^3+2x^4$ with x running from -3 to +3, and y running from -5 to +5.

For each case, take a screenshot of the graph and save as **graphQ5a.png**, etc in the directory **Worksheet02**.