*UNIX – Shell Scripting*

Practice Handout - Lecture 1

1. What are kernels? List some names of kernels. ( food for thought : Android uses which kernel)

Ans: Kernel is a central part of an operating System, it manages the operations of computer and hardware – most notably memory and CPU time.

List of kernels: linux, greased, brown etc.

Anroid uses modified linux kernel.

1. What are shells? List different types of shell.

Shell is a command interpreter.

C shell, tcsh, korn shell , bourne shell,

1. Explain “cp” command in detail. Practice some new commands as provided in the shared document.
2. What are soft link and hard link in Unix? Create a file in your home directory and make a hard link of that file. Similarly create a directory and create soft link of that directory. Check inode number of file, directory, hard link and soft link.
3. What are aliases in Unix. How aliases are created. Create an alias named – “mh”. Make sure that typing “mh” on command prompt takes you to your home directory.
4. What are Environment variables? How to check all the environment variable in your Unix operating system.

Ans: An environment variable is available to any child process of the shell. Some programs need environment variables in order to function correctly. Usually, a shell script defines only those environment variables that are needed by the programs that it runs. env

1. What are profile files in Unix. Use your profile file to set some environment variable.

~/.profile

1. Set the PS1 and PS2 environment variable in your profile file.
2. What are the commands to change the permissions and owner of a file? Practice it. Create a file and change permission to read only, execute only and read and write only.
3. Practice **vi** command. Use the cheat sheet to practice the shortcuts in insert mode, escape mode and command mode.