

LAB # 5

Introduction to Shell Script and C programming in Linux

Shell a program that takes the commands you type and translates them into instructions to the operating system.

Guidelines to students

How to Run Shell Scripts

There are two ways you can execute your shell scripts. Once you have created a script file:

Method 1

Pass the file as an argument to the shell that you want to interpret your script.

Step 1 : create the script and save it with .sh

For example, the script file show has the following lines

```
echo Here is the date and time  
date
```

Step 2 : To run the script, pass the filename as an argument to the sh (shell)

```
$ sh show or sh show.sh
```

```
Here is the date and time
```

```
Sat jun 09 13:40:15 PST 2011
```

Method 2:

Make your script executable using the chmod command.

When we create a file, by default it is created with read and write permission turned on and execute permission turned off. A file can be made executable using chmod.

Step 1 : create the script using gedit, vi , vim , ex or ed

For example, the script file show has the following lines

```
echo Here is the date and time  
date
```

Step 2 : Make the file executable

```
$ chmod u+x script_file
```

```
$ chmod u+x show or $chmod u+x /home/selab/show.sh
```

Step 3 : To run the script, just type the filename

```
$ show
```

```
Here is the date and time
```

```
Sat jun 09 13:40:15 PST 2011
```

How to run C programs

Step 1 : Use an editor, such as vi, ex, or ed to write the program. The name of the file containing the program should end in .c.

For example, the file show.c contains the following lines :

```
main()
{
printf(" Hello World ");
}
```

Step 2 : Submit the file to GCC (the GNU C Compiler)

```
$ gcc -o show show.c
```

If the program is okay, the compiled version is placed in a file called show.out

Step 3 : To run the program, type show.out

```
$ show.out or ./show
```

Hello World