Unix System and Script Programing Finalterm-Part 2

1. (40%) Write a Bourne shell script that takes an integer, N, as an argument and N is the N-th element of Fibonacci numbers. Please both output F0, F1,…, FN to an ordinary file which named “FibonacciNumbers” and show them on the screen.

The rule of Fibonacci numbers is: F0=0, F1=1, FN= FN-1 +FN-2 (n≧2)

**Score:**

Calculate Fibonacci numbers and show them on the screen. (20%)

Appropriate exception handling.

* 1. Only one argument. (5%)
  2. Only positive integer is accepted. (5%)

Output the results to an ordinary file. (10%)

1. (60%) Write a Bourne shell script that takes a directory as an argument. Then count the individual number of three kinds of files (**l, d and -**) in this directory. You have to output the individual numbers for three kinds of files to the file “FileCount”. Finally, for the biggest size file, create the softlink on the desktop.

For example:

**l** file: 3 **d** file: 2 **-** file: 1

**Score:**

Calculate the individual numbers of files and output them to the file. (30%)

Create the softlink for the biggest file at desktop. (15%)

Appropriate exception handling.

1. Only one argument and must be a directory. (5%)
2. If there are two or more biggest files, please do same operations. (10%)

**Hint:**

1. A directory may also contains three kinds of files.

2. If you want to use “find” to get all ordinary files whose size is 100, you may use instruction below.

max=100

find PATH -type f -size $max'c'

3. If you have a path along with file name, you can use “basename” command to extract the filename from the path.

Path=~/hduser/final/Find\_max

basename $Path

Find\_max