**Linux Shell Script**

**Practice1:**

**Write a shell script file in the current shell, assign executable permission to this file, execute this file in the current process and also execute in a subprocess shell, and print its process ID, as verify the scope of the local and global variables that have been defined in the shell.**

写一个脚本文件，并赋予它可执行权限，然后分别在当前进程以及子进程中执行这个脚本程序。要求该脚本程序打印当前进程号，并验证已经在Shell中定义了的本地和全局变量的作用域范围。

**Practice2:**

**Write one script file complete the following operations:**

**1. Create new two directories in your user's home directory: subdir1 subdir2**

**2. Copy the file /etc/passwd to subdir1, copy the file /etc/group to subdir2**

**3. Rename the directory subdir2 to subdir**

**4. Package and compress the directory subdir1 into xz format**

**5. Copy the packaged xz format file to the directory subdir**

**6. Decompress the compressed format file in the directory subdir**

**7. List all the files in the directory subdir**

在一个脚本文件中完成以下所有的操作（按照顺序）：

1. 在自己的用户主目录下新建两个子目录subdir1 subdir2

2. 将/etc/passwd文件拷贝到subdir1, 拷贝/etc/group到subdir2

3. 将subdir2重命名为subdir

4. 对subdir1进行打包并且压缩成xz格式

5. 将打包后的xz格式文件拷贝到subdir目录下

6. 解压subdir目录下的压缩格式文件

7. 查看subdir目录下所有的文件

**1. Variables**

(1) user-defined variables

  Variable name = content

Notice:

<1> No data type

<2> cannot have spaces on either side of the assignment

<3> all the assignment pairs Shell variables are interpreted as strings

(2) Environment Variables

PATH is a Shell The default search path

HOME The user home directory of the current user is logged

Attention:

in the Shell when referencing the contents of a variable, you need to add "$", For example : $PATH

**Practice3:**

**<1> Define a variable VAR1, to save PATH environment variable content**

**<2> Define a variable VAR2, to save HOME environment variable content**

**<3> Exchange the content of VAR1 and the VAR2, and then output the values of these variables**

**2. input and output**

(1) input

**read** var1 var2 var3

**Practice4:**

**Assigns the first value entered by the user to the variable var1, the** **second value entered by the user to var2, and the rest of the value is assigned to var3.**

**Exchange the content of var1 and the var2, and output the values of these three variables.**

**Practice5:**

**Input an existing username and find its line number in the file /etc/passwd, and output the information of this user in the passwd file as the follows**

**Line number: 16**

**UserInfo is as follows: NAME: UID: GID**

通过输入一个（已经存在的）用户名来寻找用户在/etc/passwd中的行号，并输出这一行对应/etc/passwd文件中用户信息并按照以下格式输出打印

Line number: 16

UserInfo is as follows: NAME: UID: GID