**Directory structure maintenance using shell script in the operating system**

**Some of the directory functions are:**

**-----> Navigation**

**-----> Absolute/ Relative Pathnames**

**-----> Listing Directories**

**-----> Creating Directories**

**-----> Modifying Directories**

**Execute your files as mentioned below in the output screenshot. The following shell script implements these functions of directory , using commands available in Linux.**

**CODE:**

**echo " "**

**echo "----Implementing Directory Management----"**

**echo " "**

**ch=0**

**while [ $ch -lt 6 ]**

**do**

**echo "Press the following to :"**

**echo "1) Create a new directory."**

**echo "2) Modify a directory."**

**echo "3) Navigate into directory."**

**echo "4) Listing directories."**

**echo "5) Exit."**

**read ch**

**case $ch in**

**1) echo " "**

**echo "---Creation of Directory---"**

**echo " "**

**echo "Enter the name of the directory:"**

**read name**

**mkdir $name**

**;;**

**2) echo " "**

**echo "---Modification of Directory---"**

**echo " "**

**echo "Enter the directory to be modified:"**

**read orgdir**

**echo "Press the following to :"**

**echo " "**

**echo "1) Rename directory."**

**echo "2) Copy directory to another."**

**echo "3) Move directory."**

**echo "4) Delete directory."**

**echo "5) Exit from Modify Mode."**

**read modch**

**case $modch in**

**1) echo " "**

**echo "---Rename a directory---"**

**echo " "**

**echo "Enter new name for the directory:"**

**read newname**

**mv $orgdir $newname**

**;;**

**2) echo " "**

**echo "---Copying a directory to another---"**

**echo " "**

**echo "Enter target directory:"**

**read target**

**mkdir $target**

**cp $orgdir $target**

**;;**

**3) echo " "**

**echo "---Moving a directory---"**

**echo " "**

**echo "Enter target directory:"**

**read target**

**mkdir $target**

**mv $orgdir $target**

**;;**

**4) echo " "**

**echo "---Deleting a directory---"**

**echo " "**

**rmdir $orgdir**

**;;**

**5) echo " "**

**echo "---Exiting from modify mode---"**

**echo " "**

**exit**

**;;**

**esac**

**;;**

**3)**

**echo "---Navigation of Directory---"**

**echo " "**

**echo "Enter your choice for method of navigation :"**

**echo "1) Go to Parent Directory. "**

**echo "2) Navigate to specific directory."**

**echo "3) Exit from Navigate Mode."**

**read navch**

**case $navch in**

**1) echo " "**

**echo "---Parent Directory---"**

**echo " "**

**cd ..**

**pwd**

**;;**

**2) echo " "**

**echo "---Navigation to Specific Directory---"**

**echo " "**

**echo "Enter the target Path:"**

**read path**

**cd $path**

**pwd**

**;;**

**3) echo " "**

**echo "---Exiting from Navigate Mode---"**

**echo " "**

**exit**

**;;**

**esac**

**;;**

**4)**

**echo "--- Listing of Directories---"**

**echo " "**

**echo "Enter your choice for method of listing :"**

**echo "1) List of directories. "**

**echo "2) List of directories and their details."**

**echo "3) Exit from List Mode."**

**read lisch**

**case $lisch in**

**1) echo " "**

**echo "---List of directories---"**

**echo " "**

**ls**

**;;**

**2) echo " "**

**echo "---Detailed List of directories---"**

**echo " "**

**ls -l**

**;;**

**3) echo " "**

**echo "---Exiting from List Mode---"**

**echo " "**

**exit**

**;;**

**esac**

**;;**

**5)echo " "**

**echo "---Exiting---"**

**echo " "**

**exit**

**;;**

**esac**

# 

# IMPLEMENTING DIRECTORIES IN C

#include <stdio.h>

#include <dirent.h>

int main(void)

{

DIR \*directory;

struct dirent \*entry;

directory = opendir(".");

if (directory == NULL)

{

printf("Error opening directory.\n");

return 1;

}

while ((entry = readdir(directory)) != NULL)

{

if (entry->d\_name == directory);

{

printf("File: %s\n", entry->d\_name);

}

if (entry->d\_name == directory)

{

printf(" dir: %s\n", entry->d\_name);

}

}

if (closedir(directory) == -1)

{

printf("Error closing directory.\n");

return 1;

}

return 0;

}