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D1 - 19BCE245

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Practical 7

Write a shell script for implementing directory management.

CODE :

```
1. printf "*** DIRECTORY MANAGEMENT SYSTEM ***\n"
2. choice=0
3. while [ choice != 5 ] ; do
4.    printf "\n MAIN-MENU : \n"
5.    printf "\t[1] Create a new directory\n"
6.    printf "\t[2] Modify an existing directory\n"
7.    printf "\t[3] Navigate into directory\n"
8.    printf "\t[4] Listing directories\n"
9.    printf "\t[5] Exit\n"
10.   printf " Enter choice : "
11.   read choice
12.
13.   case $choice in
14.        1)
15.               printf "\tEnter directory name : "
16.               read file_name
17.               mkdir $file_name
18.               printf "\tFile named '$file_name' created in
   $PWD.\n"
19.        ;;
20.        2)
21.               printf "\tEnter directory name : "
22.               read file_name
23.               printf "\tSUB-MENU : \n"
24.               printf "\t\t[1] Rename directory\n"
25.               printf "\t\t[2] Copy directory to
   another\n"
```

```
26.                    printf "\t\t[3] Move directory\n"
27.                    printf "\t\t[4] Delete directory\n"
28.                    printf "\t\t[5] Exit from SUB-MENU\n"
29.                    printf "\tEnter chioce : "
30.                    read choice
31.                    case $choice in
32.                            1)
33.                                    printf "\tEnter new name : "
34.                                    read new_name
35.                                    mv $file_name $new_name
36.                                    printf "\tFile '$file_name'
    renamed to '$new_name'.\n"
37.                                    ;;
38.                            2)
39.                                    printf "\tEnter target directory
    path : "
40.                                    read target
41.                                    cp -R $file_name $target
42.                                    printf "\tFile '$file_name'
    copied into '$target'.\n"
43.                                    ;;
44.                            3)
45.                                    printf "\tEnter target directory
    path : "
46.                                    read target
47.                                    mkdir $target
48.                                    mv $file_name $new_name
49.                                    printf "\tFile '$file_name'
    moved to '$target'.\n"
50.                                    ;;
51.                            4)
52.                                    printf "\tFile '$file_name' will
    be deleted permanently. Are you sure ? \n"
53.                                    printf "\t\t[1] YES\n"
54.                                    printf "\t\t[2] NO\n"
55.                                    printf "\t Enter choice : "
56.                                    read choice
57.                                    if [ $choice==1 ];
58.                                    then
59.                                        rmdir $file_name
60.                                        printf "\tFile '$file_name'
    deleted successfully.\n"
61.                                    else
```

```
62.                                    printf "\tDeletion
   operation cancelled.\n"
63.                        fi
64.                    ;;
65.                    5)
66.                        printf "\tEXITED from SUB-MENU.
   \n"
67.                    ;;
68.                    *)
69.                        printf "\tInvalid choice :(\n"
70.            esac
71.        choice=0 #reset choice variable
72.        ;;
73.      3)
74.        printf "\tSUB-MENU : \n"
75.        printf "\t\t[1] Go to parent directory\n"
76.        printf "\t\t[2] Go to specific directory\n"
77.        printf "\t\t[3] Exit from SUB-MENU\n"
78.        printf "\tEnter chioce : "
79.        read choice
80.        case $choice in
81.            1)
82.                cd ..
83.                printf "\tWorking directory changed
   to '$PWD'.\n"
84.            ;;
85.            2)
86.                printf "\tEnter directory path : "
87.                read target
88.                cd $target
89.                printf "\tWorking directory changed
   to '$PWD'.\n"
90.            ;;
91.            3)
92.                printf "\tEXITED from SUB-MENU.\n"
93.            ;;
94.            *)
95.                printf "\tInvalid choice :(\n"
96.            esac
97.            choice=0 #reset choice variable
98.        ;;
99.      4)
100.       printf "\tSUB-MENU : \n"
```
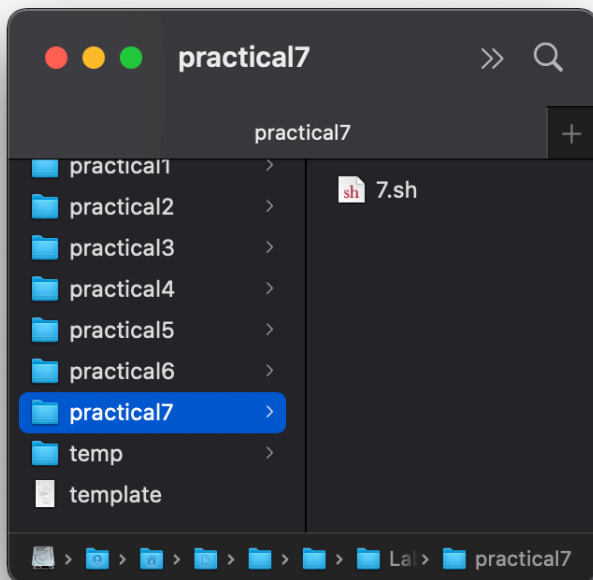
```
101.            printf "\t\t[1] List directories\n"
102.            printf "\t\t[2] List directories with details.
   \n"
103.            printf "\t\t[3] Exit from SUB-MENU\n"
104.            printf "\tEnter chioce : "
105.            read choice
106.            case $choice in
107.                    1)
108.                        printf "\tList of directories : \n"
109.                        ls
110.                    ;;
111.                    2)
112.                        printf "\tDetailed list of
   directories : \n"
113.                        ls -l
114.                    ;;
115.                    3)
116.                        printf "\tEXITED from SUB-MENU.\n"
117.                    ;;
118.                    *)
119.                        printf "\tInvalid choice :(\n"
120.                        esac
121.                        choice=0 #reset choice variable
122.        ;;
123.        5)
124.            printf " EXITED."
125.            break
126.        ;;
127.        *)
128.            printf " Invalid choice :(\n"
129.        ;;
130. esac
131.
132.done
```
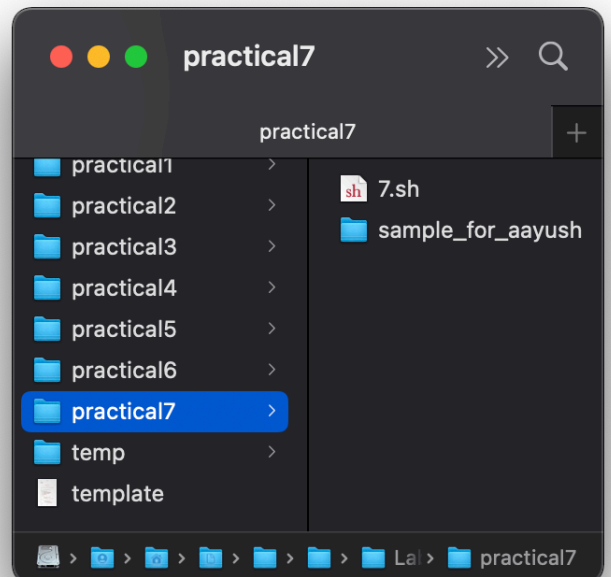
OUTPUT :

Creating new directory

```
*** DIRECTORY MANAGEMENT SYSTEM ***

MAIN-MENU :
    [1] Create a new directory
    [2] Modify an existing directory
    [3] Navigate into directory
    [4] Listing directories
    [5] Exit
Enter choice : 1
    Enter directory name : sample_for_aayush
    File named 'sample_for_aayush' created in /Users/aayush/
        Documents/sem 4/Operating System/Lab/practical7.
```
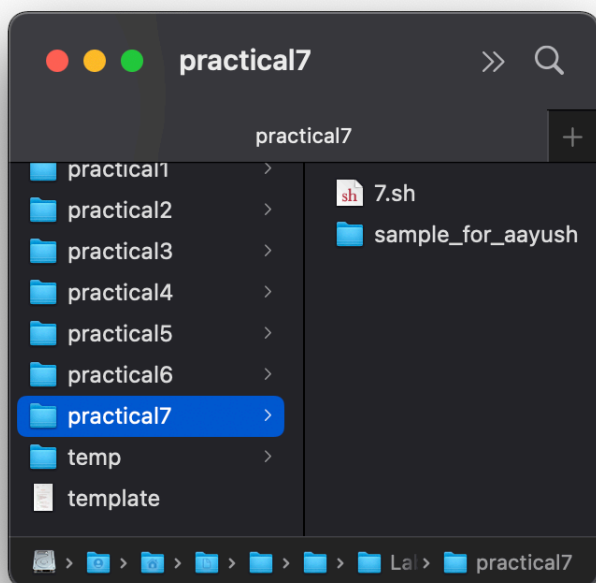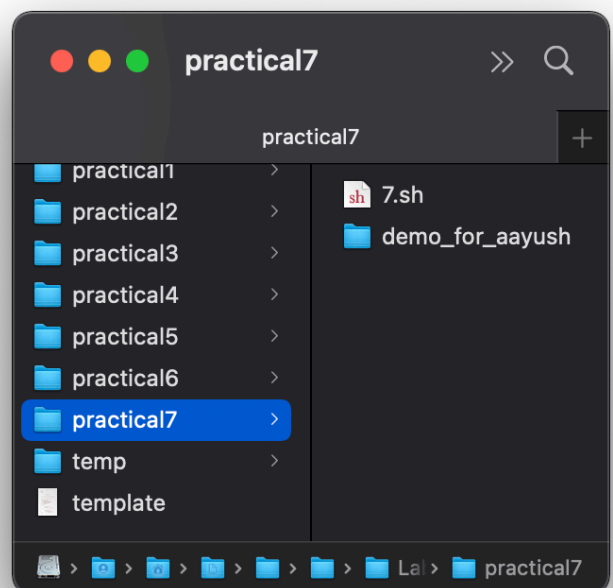

BEFORE

AFTER

Modifying existing directory

```
MAIN-MENU :
    [1] Create a new directory
    [2] Modify an existing directory
    [3] Navigate into directory
    [4] Listing directories
    [5] Exit
Enter choice : 2
    Enter directory name : sample_for_aayush
    SUB-MENU :
        [1] Rename directory
        [2] Copy directory to another
        [3] Move directory
        [4] Delete directory
        [5] Exit from SUB-MENU
    Enter chioce : 1
    Enter new name : demo_for_aayush
    File 'sample_for_aayush' renamed to 'demo_for_aayush'.
```


BEFORE

AFTER

Navigating and Listing directories

```
MAIN—MENU :
    [1] Create a new directory
    [2] Modify an existing directory
    [3] Navigate into directory
    [4] Listing directories
    [5] Exit
 Enter choice : 3
    SUB—MENU :
        [1] Go to parent directory
        [2] Go to specific directory
        [3] Exit from SUB—MENU
    Enter chioce : 1
    Working directory changed to '/Users/aayush/Documents/sem 4/
        Operating System/Lab'.

MAIN—MENU :
    [1] Create a new directory
    [2] Modify an existing directory
    [3] Navigate into directory
    [4] Listing directories
    [5] Exit
 Enter choice : 4
    SUB—MENU :
        [1] List directories
        [2] List directories with details.
        [3] Exit from SUB—MENU
    Enter chioce : 1
    List of directories :
commands.txt      practical1   practical4   practical7
demo.txt      practical2   practical5   temp
democopy.txt      practical3   practical6   template.pages
```

Working Directory :