

Linux Basic Commands

Linux is a powerful and versatile operating system that provides a command-line interface (CLI) to perform various tasks. Understanding the basic Linux commands is essential for navigating and managing the system effectively. This document provides an overview of some commonly used Linux commands and their functionalities.

1. **ls**: List Files and Directories

- **ls**: List files and directories in the current directory.
- **ls -l**: Display detailed information, including permissions, owner, size, and modification time.
- **ls -a**: Show hidden files and directories.
- **ls -R**: List files and directories recursively.

```
Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training
$ ls
'Task 1'/ 'Task 2'/ 'Task 3'/ 'Task 4'/ 'Task 5'/

Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training
$ ls -l
total 12
drwxr-xr-x 1 Blu-Ray 197121 0 Aug 16 19:25 'Task 1'/
drwxr-xr-x 1 Blu-Ray 197121 0 Aug 18 23:39 'Task 2'/
drwxr-xr-x 1 Blu-Ray 197121 0 Aug 22 23:54 'Task 3'/
drwxr-xr-x 1 Blu-Ray 197121 0 Aug 27 20:37 'Task 4'/
drwxr-xr-x 1 Blu-Ray 197121 0 Aug 31 19:16 'Task 5'/

Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training
$ ls -a
./ ../ 'Task 1'/ 'Task 2'/ 'Task 3'/ 'Task 4'/ 'Task 5'/

Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training
$ ls -R
.:
'Task 1'/ 'Task 2'/ 'Task 3'/ 'Task 4'/ 'Task 5'/

'./Task 1':
01007218483_Task1_1.zip 01007218483_Task1_3.zip 1.1/ 1.3/
01007218483_Task1_2.zip 01007218483_Task1_4.zip 1.2/ 1.4/

'./Task 1/1.1':
etc ...
```

2. **cd**: Change Directory

- **cd**: Change to the home directory.
- **cd [directory]**: Change to the specified directory.
- **cd ..**: Move to the parent directory.
- **cd -**: Switch to the previous directory.

```
Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments
$ cd

Blü-Ray@TEMMOO MINGW64 ~
$ cd ..

Blü-Ray@TEMMOO MINGW64 /c/Users
$ cd ..

Blü-Ray@TEMMOO MINGW64 /c
$ cd ..

Blü-Ray@TEMMOO MINGW64 /
$ cd D

Blü-Ray@TEMMOO MINGW64 /D
$ cd ProjectsAndAssignments

Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments
$ cd -
/D
```

3. **pwd**: Print Working Directory

- **pwd**: Display the current working directory.

```
Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training
$ pwd
/D/ProjectsAndAssignments/MIA_Training
```

4. **mkdir**: Create Directory

- **mkdir [directory]**: Create a new directory with the specified name.

```
Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5
$ mkdir Task_5_2
```

5. **rm**: Remove Files and Directories

- **rm [file]**: Delete the specified file.
- **rm -r [directory]**: Remove a directory and its contents recursively.
- **rm -f [file]**: Forcefully remove a file without prompting for confirmation.

```
Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5/Task_5_2
$ rm myFile.txt

Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5/Task_5_2
$ cd ..

Blü-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5
$ rm -r Task_5_2
```

6. **cp**: Copy Files and Directories

- **cp [source] [destination]**: Copy a file or directory to a specified destination.
- **cp -r [source] [destination]**: Copy a directory and its contents recursively.

```
Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5/Task_5_2
$ cp myFile.txt ../
```

7. **mv**: Move and Rename Files and Directories

- **mv [source] [destination]**: Move or rename a file or directory to the specified destination.

```
Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5/Task_5_2
$ mv myFile.txt ../
```

8. **touch**: Create Empty Files

- **touch [file]**: Create an empty file with the specified name.

```
Blu-Ray@TEMMOO MINGW64 /D/ProjectsAndAssignments/MIA_Training/Task_5/Task_5_2
$ touch myFile.txt
```