

REDIRECTIONS

Redirection in shell refers to the process of changing the default destinations of input and output streams for commands. By default, commands receive input from the keyboard and send output to the terminal screen, and error messages to the terminal screen. Redirection allows users to change these defaults, directing input from files and sending output to files or other commands.

Types of Redirections

- < --> Input Redirections
- > --> Output Redirections
- >> --> Append Output Redirection
- 1 --> Success
- 2 --> Failure (Redirecting Standard Error)
- & --> Both success and failure

Redirection is a fundamental concept in shell scripting and command-line usage, enabling users to control data flow and automate tasks efficiently.

Redirections Uses:

	Uses
Saving command output	Store the results of commands in files for later use or analysis.

Automating tasks	Use files as input for commands to perform batch processing.
Managing errors	Capture error messages in separate files for debugging.
Creating logs	Save output and error messages to log files for monitoring and auditing.
Suppressing output	Discard unwanted output to keep the terminal clean.

Handson Example:

- [ec2-user@ip-172-31-28-228 ~]\$ ls -l > output.log
- [ec2-user@ip-172-31-28-228 ~]\$ cat output.log

total 4

drwxr-xr-x 3 ec2-user ec2-user 4096 Jun 12 11:31 Shell-Scripting -

rw-r--r-- 1 ec2-user ec2-user 0 Jun 12 13:41 output.log

- [ec2-user@ip-172-31-28-228 ~]\$ lkjhggghj -l > output.log

-bash: lkjhggghj: command not found

- [ec2-user@ip-172-31-28-228 ~]\$ ls -l 1>output.log

- [ec2-user@ip-172-31-28-228 ~]\$ cat output.log

total 4

drwxr-xr-x 3 ec2-user ec2-user 4096 Jun 12 11:31 Shell-Scripting

-rw-r--r-- 1 ec2-user ec2-user 0 Jun 12 13:43 output.log

➤ [ec2-user@ip-172-31-28-228 ~]\$ ls -l 2>output.log

total 4

drwxr-xr-x 3 ec2-user ec2-user 4096 Jun 12 11:31 Shell-Scripting

-rw-r--r-- 1 ec2-user ec2-user 0 Jun 12 13:48 output.log

➤ [ec2-user@ip-172-31-28-228 ~]\$ cat output.log

No response

➤ [ec2-user@ip-172-31-28-228 ~]\$ ls -l &>output.log

➤ [ec2-user@ip-172-31-28-228 ~]\$ cat output.log

total 4

drwxr-xr-x 3 ec2-user ec2-user 4096 Jun 12 11:31 Shell-Scripting

-rw-r--r-- 1 ec2-user ec2-user 0 Jun 12 13:48 output.log

➤ [ec2-user@ip-172-31-28-228 ~]\$ lskjhg -l &>output.log

➤ [ec2-user@ip-172-31-28-228 ~]\$ cat output.log

-bash: lskjhg: command not found

➤ [ec2-user@ip-172-31-28-228 ~]\$ lfss -l &>>output.log

➤ [ec2-user@ip-172-31-28-228 ~]\$ cat output.log

-bash: lskjhg: command not found -bash: lfss: command not found