

### AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

# **OPERATING SYSTEM**

FALL 2024-2025

Section: H Group: 08

## MID TERM REPORT

### Supervised By

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Command	Explanation	Example
pwd	Display current directory	\$ pwd
uname	Check operating system information	\$ uname
mkdir	Create a new directory	\$ mkdir MyFolder
cd	Navigate to a directory	\$ cd MyFolder
ls -la	List files in the directory with detailed information	\$ ls -la
ls -a	List all files, including hidden files	\$ ls -a
touch	Create a new file	\$ touch a.txt
echo	Add content to a file	\$ echo Hey Linux > a.txt
cat	View the content of a file	\$ cat a.txt
mkdir -p	Create a nested directory structure	<pre>\$ mkdir -p Alpha/Beta/Gamma</pre>
uname -r	Display system kernel information	\$ uname -r
uname -m	Display system architecture	\$ uname -m
chmod	Change file permission	\$ chmod 777 file1.txt
pwd>>	Redirect command output to a new file	<pre>\$ pwd &gt;&gt; CommandOutput.txt</pre>
history >>	Append history to a file	\$ history >> History.txt

Command	Explanation	Example
ср	Copy a file	\$ cp file1.txt file1_backup.txt
mv	Move or rename a file	<pre>\$ mv file2.txt mydir \$ mv file1.txt filemv.txt</pre>
rm	Delete a file	\$ rm file1_backup.txt
rm -d	Remove an empty directory	\$ rm -d EmptyDirectory
rm -r	Remove a directory and all its contents	\$ rm -r testdir
date	Display the current date and time	\$ date
ifconfig	Display the IP configuration of the system	\$ ifconfig
ping	Check connectivity to a website	\$ ping www.google.com
ps	Display the list of running processes	\$ ps all
grep	Find lines containing a specific pattern	\$ grep 4 numbers.txt
whoami	Display the current logged-in user	\$ whoami
sort	Sort the contents of a file	\$ sort numbers.txt
cat -n	Display file contents with line numbers	\$ cat -n combined.txt

Command	Explanation	Example
mkdir && cd	Create a directory and navigate into it	<pre>\$ mkdir Project &amp;&amp; cd Project</pre>
head	Display the first 10 lines of a file	\$ head -10 display.txt
tail	Display the last 10 lines of a file	\$ tail -10 display.txt
cut	Extract sections from each line of files	\$ cut -c-4 display.txt
paste	Merge lines of files	\$ paste Name.txt Age.txt
ls	List and sort files	\$ ls   sort
cat >>	Append content to a file	\$ cat >> numbers.txt
echo >>	Append text to a file	<pre>\$ echo This is a test &gt;&gt; data.txt</pre>
ls *.txt	List files with a specific extension	\$ ls *.txt
mv	Move between directories	\$ cd Alpha
touch .e.txt	Create a hidden file	\$ touch .e.txt
echo apple, banana, cherry	Create a file with content	<pre>\$ echo apple, banana, cherry &gt;&gt; data.txt</pre>
man	Display the manual for a command	\$ man ls
clear	Clear terminal screen	\$ clear

Command	Explanation	Example
sort >>	Sort contents and save to a file	<pre>\$ sort data.txt &gt;&gt; sorted_data.txt</pre>
grep banana	Find lines containing a word	\$ grep banana data.txt
cat sorted_data.txt	Display sorted file contents	\$ cat sorted_data.txt
rm data.txt sorted_data.txt	Delete multiple files	<pre>\$ rm data.txt sorted_data.txt</pre>
mkdir TestDir && cd	Create a directory, navigate	\$ mkdir TestDir && cd
TestDir && echo Hello >>	into it, create a file with	TestDir && echo Hello >>
test.txt	content	test.txt
cat file1.txt file2.txt	Concatenate files	\$ cat file1.txt file2.txt
echo "Hello World" > output.txt	Create a file with text	<pre>\$ echo "Hello World" &gt; output.txt</pre>
echo "Appending a new line." >> output.txt	Append text to a file	<pre>\$ echo "Appending a new line." &gt;&gt; output.txt</pre>
cat output.txt	Display file contents	\$ cat output.txt
cat output.txt file2.txt>> combined.txt	Combine files into one	<pre>\$ cat output.txt file2.txt &gt;&gt; combined.txt</pre>
cat combined.txt	View combined file	\$ cat combined.txt
cat file2.txt >> output.txt	Append file contents to another file	<pre>\$ cat file2.txt &gt;&gt; output.txt</pre>
sort output.txt	Sort file contents	\$ sort output.txt

Command	Explanation	Example
cp output.txt file2.txt	Copy multiple files to a	\$ cp output.txt file2.txt
mydir/	directory	mydir/
rm output.txt file1.txt	Delete multiple files	\$ rm output.txt file1.txt
mkdir -p	Create a directory and	\$ mkdir -p
Folder1/SubFolder	subdirectory	Folder1/SubFolder
rm -r Folder1	Delete a directory and its contents	\$ rm -r Folder1
cat >> numbers.txt	Create a file with numbers	\$ cat >> numbers.txt
sort numbers.txt	Sort numbers in a file	\$ sort numbers.txt
grep 4 numbers.txt	Find lines with a specific number	\$ grep 4 numbers.txt
rm numbers.txt	Delete a file	\$ rm numbers.txt
echo Hello World > data.txt	Create a file with text	<pre>\$ echo Hello World &gt; data.txt</pre>
echo This is a test >> data.txt	Append text to a file	<pre>\$ echo This is a test &gt;&gt; data.txt</pre>
cat data.txt	Display file contents	\$ cat data.txt
sort data.txt >>	Sort and save file contents	\$ sort data.txt >>
sorted_data.txt	Soft and save the contents	sorted_data.txt
grep banana data.txt	Find lines with a word	\$ grep banana data.txt
cat sorted_data.txt	Display sorted file contents	\$ cat sorted_data.txt

Command	Explanation	Example
rm data.txt sorted data.txt	Delete multiple files	\$ rm data.txt
_	•	sorted_data.txt
mkdir Project && cd	Create a directory, navigate	\$ mkdir Project && cd
Project && touch README.txt	into it, and create a file	Project && touch README.txt
date && ls	Display date and list files	\$ date && ls
mkdir TestDir && cd	Create a directory, navigate	\$ mkdir TestDir && cd
TestDir && echo Hello >> test.txt	into it, and create a file with content	TestDir && echo Hello >> test.txt
iest.txt		cco.cxc
wc	Count words, line and characters in file	\$ wc file1.txt
	Characters in the	
nl	Display number lines in a file	\$ nl file1.txt
	The	
cat file1.txt file2.txt	Concatenate files	\$ cat file1.txt file2.txt
head -10 display.txt	Display the first 10 lines of	\$ head -10 display.txt
	a file	
tail -10 display.txt	Display the last 10 lines of	\$ tail -10 display.txt
	a file	
cut -c-4 display.txt	Extract columns from a file	\$ cut -c-4 display.txt
paste Name.txt Age.txt	Combine files horizontally	\$ paste Name.txt Age.txt