



**AMERICAN INTERNATIONAL UNIVERSITY – BANGLADESH**

**DEPARTMENT OF COMPUTER SCIENCE**

**OPERATING SYSTEM**

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## **Mid Term Report**

**Group No: 09**

**Section: H**

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Command Name	Explanation	Example
pwd	Prints the current working directory path.	pwd
uname	Displays basic information about the OS.	Uname
uname -r	Displays the current kernel version.	uname -r
uname -m	Shows the system architecture type.	uname -m
mkdir	Creates a new folder in the current location.	mkdir NewDir
mkdir -p	Creates directories within directories(Nested Directories)	mkdir -p dir1/dir2/dir3
cd	Changes the current working directory to a specified one.	cd dir1/dir2 cd ..
ls	Lists files and directories within the current directory	ls
ls -la	Lists all files with detailed permissions.	ls -la
ls -a	Shows all files, including hidden files.	ls -a
ls *.[extension name]	Lists all the files with the given extension name	ls *.txt
touch	Creates an empty file, to creates multiple files simultaneously, to create hidden files	touch file.txt touch file1.txt file2.txt touch .hidden file
touch	Creates multiple files simultaneously.	
echo	Writes text to a file, overwriting existing content.	echo "Hello" > file.txt
echo	Append text to the end of a file.	echo "World" >> file.txt
cat	Displays the content of a file.	cat file.txt Hello World
>	Saves the output of a command to a file.	pwd > output.txt
>>	Appends command output to an existing file.	uname >> logFile.txt

Command Name	Explanation	Example
history	Shows the command output	history >> History.txt
cat	Combines multiple files into a new file.	cat output.txt file2.txt >> combined.txt
cat -n	Displays the content of a file with line numbers.	cat -n combined.txt
mv	Moves a file to a new location.	mv file2.txt mydir
rm	Deletes a file.	rm file1_backup.txt
cp	Copies a file to a new file.	cp file1.txt file1_backup.txt
cp	Copies files to a new directory.	cp output.txt mydir/ file2.txt
mv	Rename a file to a new one	mv old_name.txt new_name.txt
rm -d	Removes an empty directory.	rm -d EmptyDirectory
rm -r	Deletes a directory and all its contents.	rm -r testdir
date	Displays the current date and time in the default format.	date
date	Displays the current date in AM/PM format.	date "+%r"
cd --help	Provides help for the cd command.	cd --help
ncal	Displays the current month calendar with Sunday as the first day.	ncal -dS
echo	Performs a calculation in the terminal.	echo \$(( (3 + 4) * 5 ))
wc	Counts the total lines, words, and characters in a file.	wc a.txt
wc -c	Displays only the number of characters in a file.	wc -c a.txt
wc -l	Displays only the number of lines in a file.	wc -l a.txt
nl	Displays the contents of a file with line numbers.	nl a.txt
nl -i2	Increments line numbers by a specified value (e.g., 1, 3, 5).	nl -i2 a.txt
sort	Sorts the contents of a file alphabetically.	sort a.txt

Command Name	Explanation	Example
sort -r	Sorts the contents of a file in reverse order.	sort -r a.txt
sort -u	Removes duplicate lines while sorting.	sort -u a.txt
sort -k	Sorts based on a specific word or field in each line.	sort -k 2 a.txt
head	Displays the first 10 lines of a file.	head a.txt
tail	Displays the last 10 lines of a file.	tail a.txt
head -6c	Displays the first 6 characters of a file.	head -6c a.txt
head -5	Displays the first 5 lines of a file.	head -5 a.txt
head	Displays the first 5 lines of multiple files.	head -5 a.txt b.txt
cut	Cuts fields after a specific delimiter.	cut -d, -f 1,3 a.txt
cut -c	Cuts a range of characters from a file.	cut -c 1-4 a.txt
cut -c	Cuts all characters starting from a specific position.	cut -c 5- a.txt
paste	Merges the contents of two files line by line.	paste f1.txt f2.txt
paste -d	Adds a delimiter between merged lines.	paste -d ", " f1.txt f2.txt
date -u	Displays the current date and time in UTC format.	date -u
grep	Searches for a specific word in a file (case-insensitive).	grep -i "World" a.txt
grep	Searches for a specific word in a file (case-sensitive).	grep "World" a.txt
grep -c	Counts the exact occurrences of a word in a file.	grep -c "World" a.txt
grep -c -i	Counts occurrences of a word (case-insensitive).	grep -c -i "World" a.txt
grep -o	Displays only the matched word from a file.	grep -o "World" a.txt
grep -v	Displays all lines except those containing a word.	grep -v "World" a.txt
chmod	Changes file permissions.	chmod 644 f1.txt

Command Name	Explanation	Example
man	Displays the manual page for a command (e.g., mkdir, rm).	man mkdir
ls   grep	Filters file names using a pattern.	ls   grep "test"
sort --ignore-case	Sorts file names in alphabetical order ignoring case.	ls   sort --ignore-case
time	Measures and displays the time taken to execute a command.	time
ps aux	Displays detailed information about all running processes.	ps aux
ifconfig	Displays network configuration information.	ifconfig