File and Folder Management Commands

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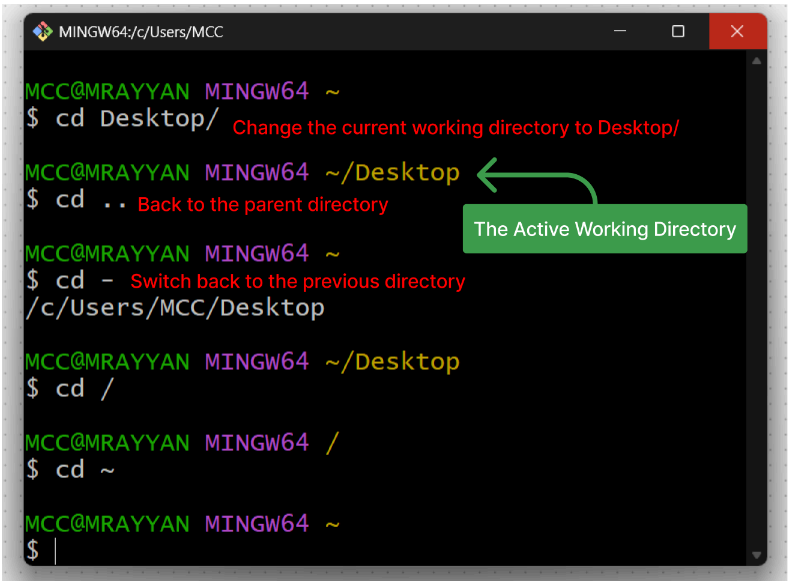
cd - Change Directory

The cd command is used to change the current working directory.

Syntax: `cd [directory_path]`

Options:

- `cd` (without arguments): Changes to the user's home directory.
- `cd ..`: Moves to the parent directory.
- `cd -`: Switches back to the previous directory.
- `cd ~`: Changes to the user's home directory. Equivalent to `cd /c/Users/username` in Windows.
- `cd /`: Changes to the root directory.



```
MCC@MRAYYAN MINGW64 ~
$ cd Desktop/

MCC@MRAYYAN MINGW64 ~/Desktop
$ cd ..

MCC@MRAYYAN MINGW64 ~
$ cd -
/c/Users/MCC/Desktop

MCC@MRAYYAN MINGW64 ~/Desktop
$ cd /

MCC@MRAYYAN MINGW64 /
$ cd ~

MCC@MRAYYAN MINGW64 ~
$
```

MINGW64:/c/Users/MCC
Change the current working directory to Desktop/
Back to the parent directory
The Active Working Directory
Switch back to the previous directory

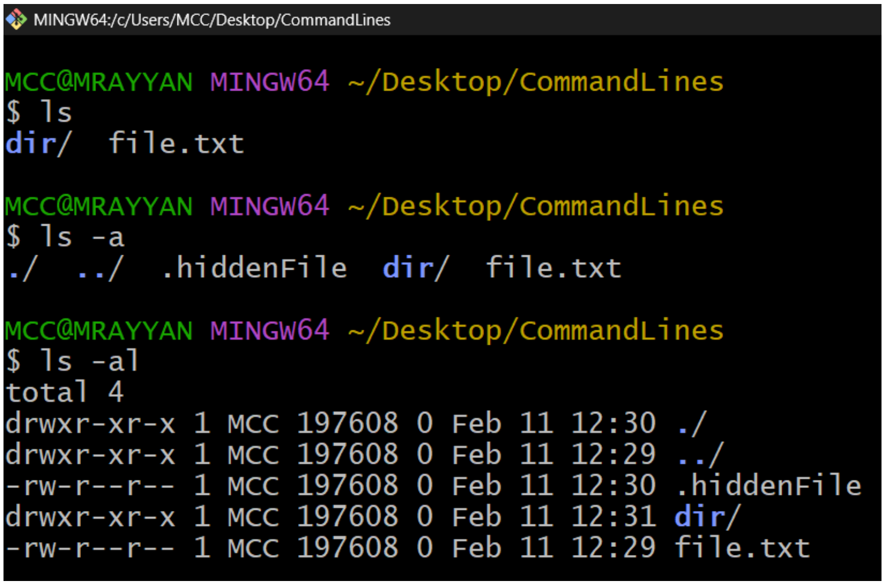
ls - List Directory Contents

The ls command lists the contents of a directory.

Syntax: `ls [options] [directory_path]`

Options:

- -l: Displays detailed information (long listing format).
- -a: Shows hidden files (those starting with a dot .).
- -h: Human-readable file sizes (e.g., KB, MB).
- -R: Recursively lists subdirectories.



MINGW64:/c/Users/MCC/Desktop/CommandLines

```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls -a
./  ../  .hiddenFile  dir/  file.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls -al
total 4
drwxr-xr-x 1 MCC 197608 0 Feb 11 12:30 ./
drwxr-xr-x 1 MCC 197608 0 Feb 11 12:29 ../
-rw-r--r-- 1 MCC 197608 0 Feb 11 12:30 .hiddenFile
drwxr-xr-x 1 MCC 197608 0 Feb 11 12:31 dir/
-rw-r--r-- 1 MCC 197608 0 Feb 11 12:29 file.txt
```

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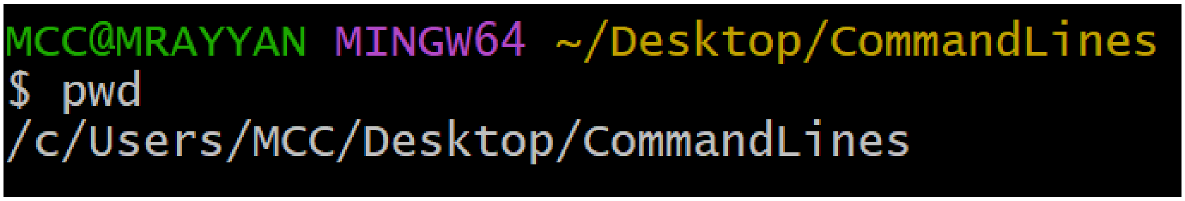
pwd - Print Working Directory

The pwd command displays the absolute path of the current working directory.

Syntax: pwd



```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ pwd
/c/Users/MCC/Desktop/CommandLines
```

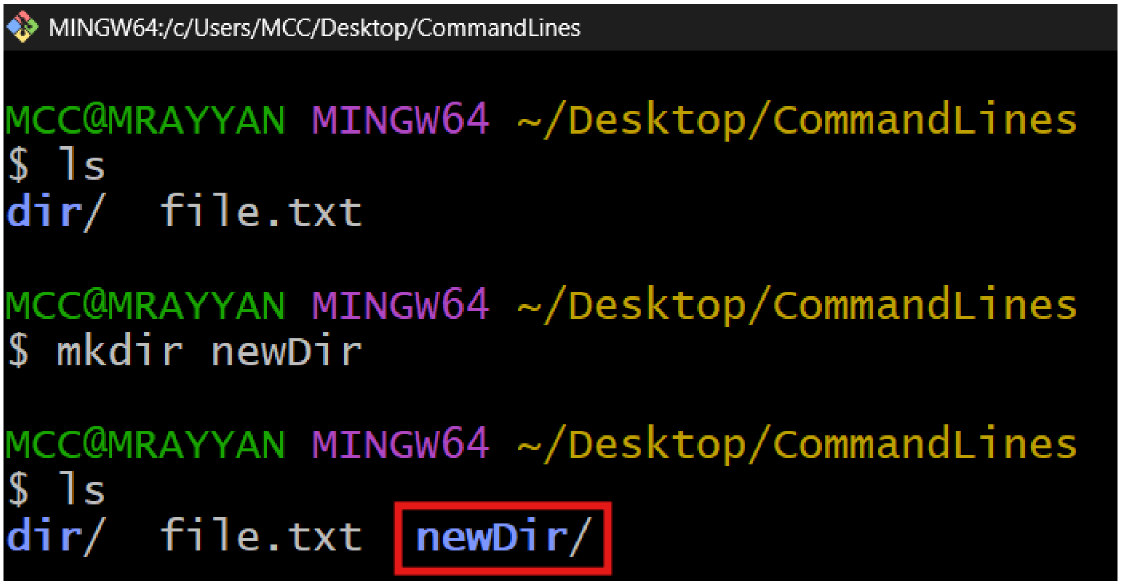
mkdir - Create a Directory

The mkdir command creates a new directory.

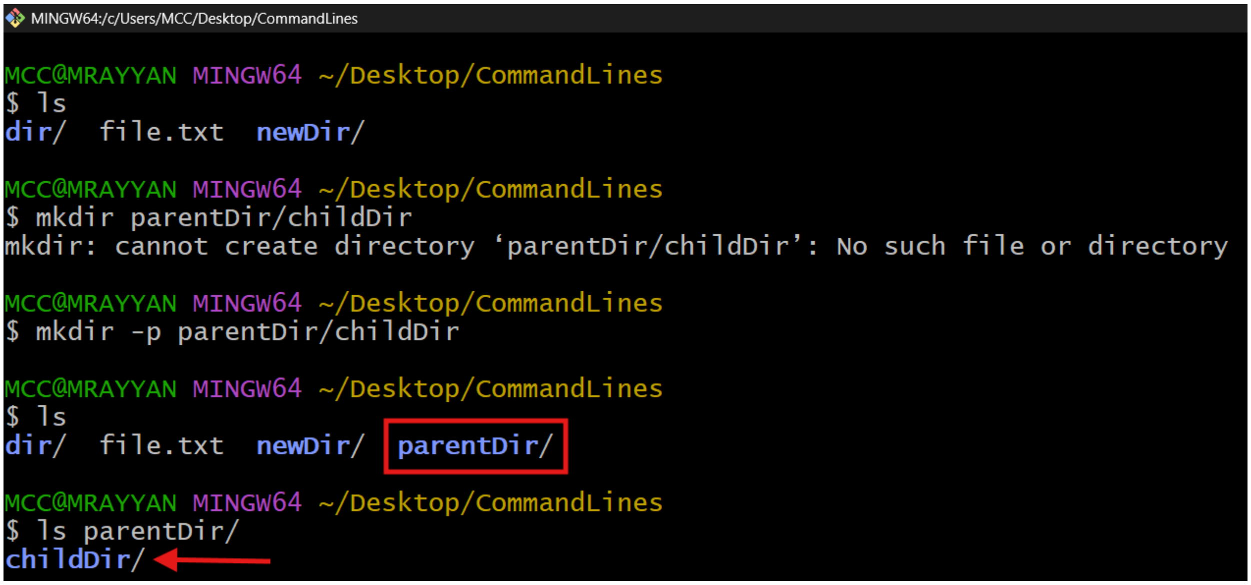
Syntax: mkdir [options] [directory_name]

Options:

- -p: Creates parent directories as needed.



```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ mkdir newDir

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newDir/
```

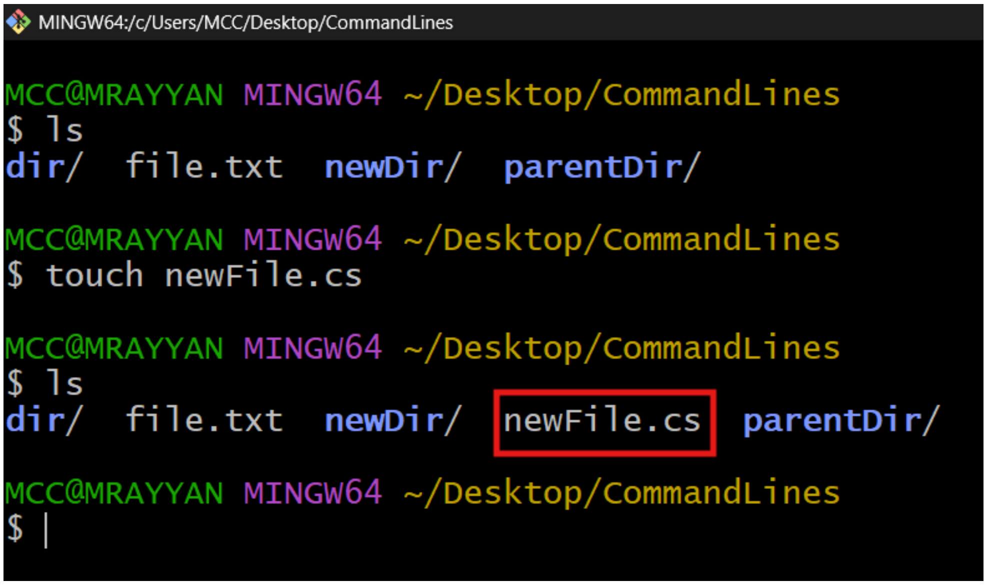


```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ mkdir parentDir/childDir
mkdir: cannot create directory ‘parentDir/childDir’: No such file or directory

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ mkdir -p parentDir/childDir

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newDir/  parentDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls parentDir/
childDir/
```

touch - Create a File

The touch command creates an empty file or updates the timestamp of an existing file.

Syntax: touch [file_name]



MINGW64:/c/Users/MCC/Desktop/CommandLines

```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newDir/  parentDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ touch newFile.cs

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newDir/  newFile.cs  parentDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ |
```

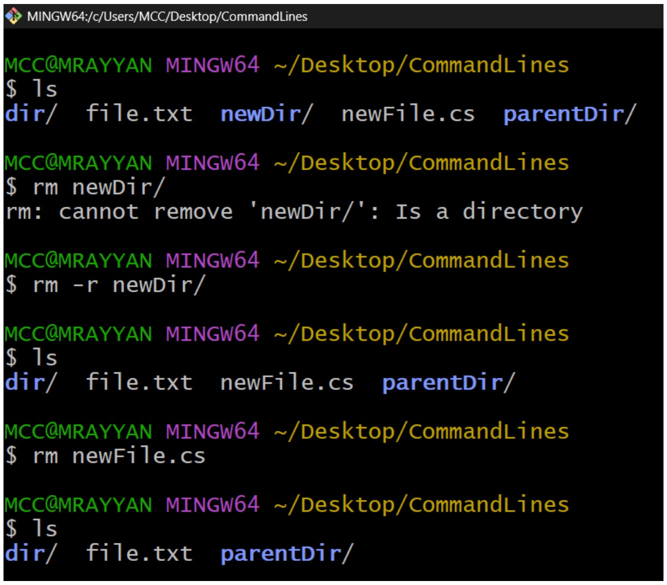
rm - Remove a File

The rm command deletes a file or multiple files.

Syntax: `rm [options] [file_name]`

Options:

- `-r`: Recursively remove directories and their contents.
- `-f`: Forcefully remove files without prompting for confirmation.


MINGW64:/c/Users/MCC/Desktop/CommandLines

```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newDir/  newFile.cs  parentDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ rm newDir/
rm: cannot remove 'newDir/': Is a directory

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ rm -r newDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  newFile.cs  parentDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ rm newFile.cs

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
dir/  file.txt  parentDir/
```

rmdir - Remove a Directory

The rmdir command removes an empty directory. it's like `rm -r` but only for empty directories.

Syntax: `rmdir [directory_name]`

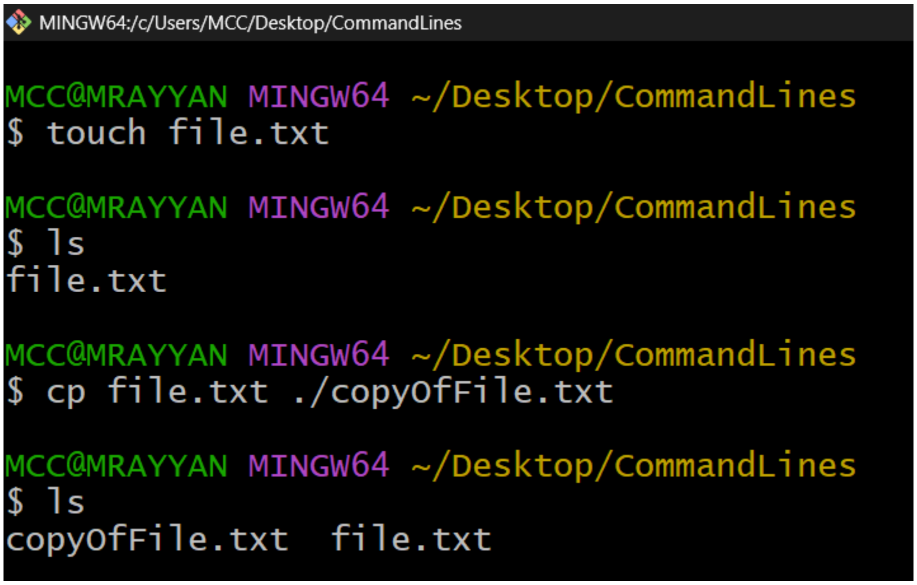
cp - Copy a File

The cp command copies files or directories.

Syntax: `cp [options] source destination`

Options:

- `-r`: Recursively copy directories.
- `-i`: Prompt before overwriting existing files.



MINGW64:/c/Users/MCC/Desktop/CommandLines

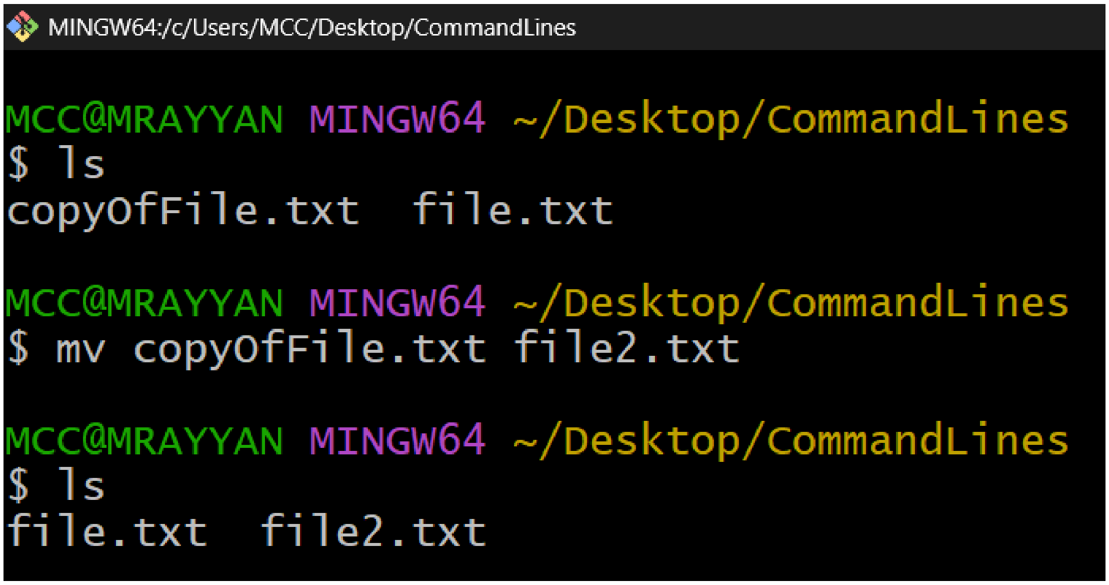
```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ touch file.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
file.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ cp file.txt ./copyOfFile.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
copyOfFile.txt  file.txt
```

mv - Move or Rename a File/Directory

The mv command moves or renames files and directories.

Syntax: `mv [options] source destination`

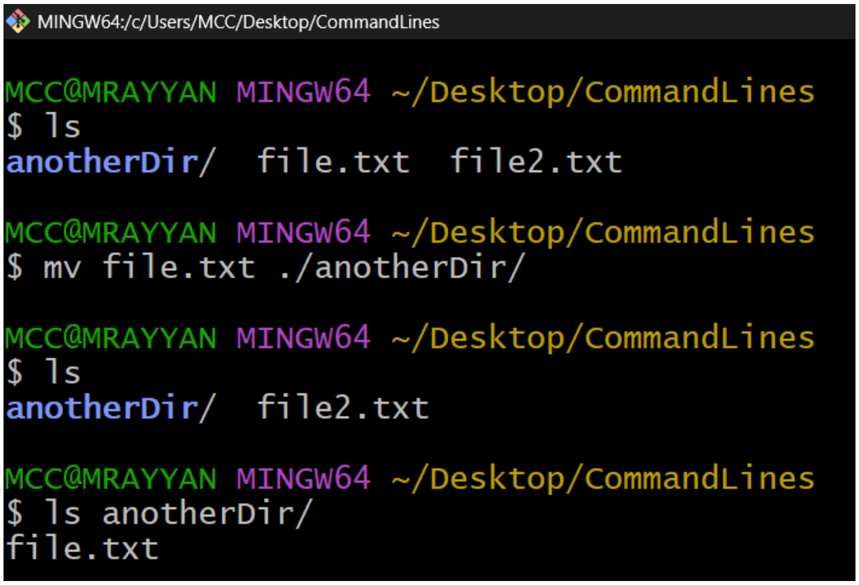
If the destination is a new file name, the source file is renamed.



MINGW64:/c/Users/MCC/Desktop/CommandLines

```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
copyOfFile.txt  file.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ mv copyOfFile.txt file2.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
file.txt  file2.txt
```

If the destination is an existing directory, the source file is moved to that directory.



MINGW64:/c/Users/MCC/Desktop/CommandLines

```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
anotherDir/  file.txt  file2.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ mv file.txt ./anotherDir/

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls
anotherDir/  file2.txt

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ ls anotherDir/
file.txt
```

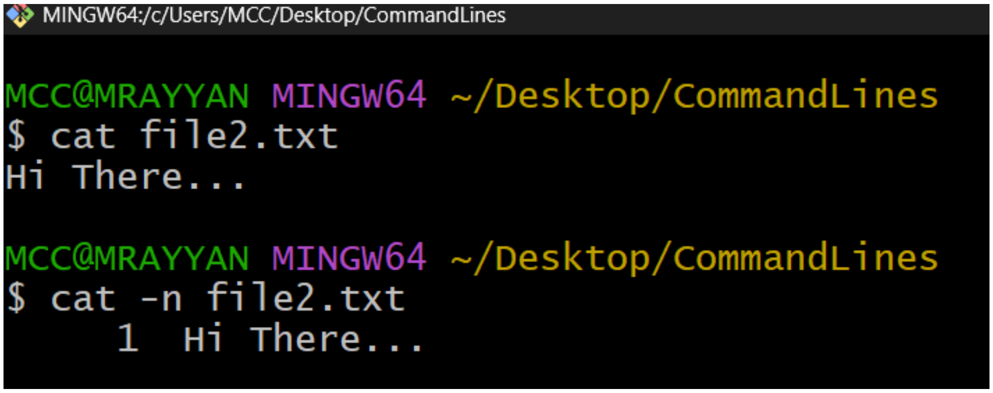
cat - Concatenate and Display File Content

The cat command displays the contents of a file, concatenates files, or creates new files.

Syntax: `cat [options] [file_name]`

Options:

- `-n`: Number all output lines.



MINGW64:/c/Users/MCC/Desktop/CommandLines

```
MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ cat file2.txt
Hi There...

MCC@MRAYYAN MINGW64 ~/Desktop/CommandLines
$ cat -n file2.txt
     1  Hi There...
```

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clear - Clear the Terminal Screen

The clear command clears the terminal screen of all previous commands and output.

Syntax: `clear`
