



Introduction to the Command Prompt

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For Windows Users (Developer Style)

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Part 1: Preliminaries

What is the Command Prompt?

- The **Command Prompt** (or terminal) is a **text-based interface** for communicating with your computer.
- It allows developers to:
 - Navigate the file system
 - Run scripts or programs
 - Manage files quickly and efficiently

Developers love it because it's faster and more powerful than using menus or buttons.

Opening PowerShell

To open a PowerShell prompt:

1. Press **Windows + S** to open **Search**
2. Type **PowerShell**
3. Press **Enter**

Alternatively, right-click the **Start Menu** → select **Windows PowerShell**

PowerShell is a modern replacement for the old `cmd.exe` .

Files and Directory Structure

- Windows organizes data into **directories** (folders).
- The top-level drive is `C:\`
- Your personal files live in:
`C:\Users\your-username`

The **home directory** can be represented as `~` (similar to Linux).

```
pwd
```

Prints the current directory path.



Part 2: Common Commands in PowerShell



Listing Files in a Directory

```
ls
```

Lists all files in the current folder.

For detailed information (including hidden files):

```
ls -Force
```



Moving Between Directories

```
cd directory-name
```

Change to another folder.

```
cd ..
```

Move up one level.

```
cd ~
```

Return to your home directory.

Your Home and Projects Directory

It's common for developers to keep work in:

```
cd ~/projects
```

If it doesn't exist, create it:

```
mkdir projects
```

Organizing code in projects keeps things neat.

Moving and Copying Files

Move a file:

```
mv file.txt ~/projects
```

Copy a file:

```
cp file.txt ~/projects
```

Rename a file:

```
mv oldname.txt newname.txt
```


Deleting Files and Directories

Delete a file:

```
rm file.txt
```

Delete an empty folder:

```
rmdir folder
```

Delete a folder and all its contents:

```
rm -r folder
```

Always double-check paths before removing recursively!

Part 3: Hidden Files

What Are Hidden Files?

- Files starting with `.` are hidden.
- Common examples: `.gitignore`, `.env`

List them:

```
ls -Force
```



Creating and Editing a .env File

Create a hidden file:

```
touch .env
```

Edit with Notepad:

```
notepad .env
```

View contents:

```
cat .env
```

`.env` files often store secret keys and environment settings.

Part 4: PowerShell vs. Anaconda Prompt

Understanding the Difference

- **PowerShell:**

The general-purpose Windows shell: versatile for all system operations.

- **Anaconda Prompt:**

A specialized environment provided by Anaconda for managing Python environments and packages.

Essentially, Anaconda Prompt = PowerShell + Python setup preloaded.

You can use either, but Anaconda makes working with Python smoother.

Part 5: Exercises

Practice Commands to Build Confidence

1. Print your current directory:

```
pwd
```

2. List files (including hidden):

```
ls -Force
```

3. Navigate to your home folder:

```
cd ~
```

4. Create a folder named projects:

```
mkdir projects
```


5. Enter it and create a file:

```
cd projects  
ni notes.txt
```

6. Edit and save the file:

```
notepad notes.txt
```

7. Copy and move files:

```
cp notes.txt backup.txt  
mv backup.txt ~
```

8. Delete a file:

```
rm ~/backup.txt
```

9. Create and view a hidden file:

```
ni .config  
cat .config
```

10. Remove the projects folder (carefully):

```
cd ~  
rm -r projects
```



You're Ready!

You now understand the fundamentals of the Command Prompt and PowerShell.

Start exploring, automate your work, and feel the power of the terminal. 💪

