■■ Command Line Tutorial for Mac Users

Part 1: Introduction — What is the Command Line?

The command line is a way to interact with your computer using text-based commands rather than clicking icons. On a Mac, the command line interface is accessed through an app called Terminal. In this course, you will use the Terminal app during environment setup, and later the integrated terminal inside Cursor. It may look intimidating at first, but it is simply another tool — like Finder, but more powerful and faster once you are used to it.

Part 2: Preliminaries — Files and Directories

Your computer's files are organized in a tree of folders (directories). The command line gives you tools to explore, navigate, and manage these. Here are essential commands:

- **pwd**: Prints the current working directory.
- **ls**: Lists files and directories.
- **cd foldername**: Change into a directory.
- **cd ..**: Go to the parent directory.
- **cat filename**: Show the contents of a file.
- **less filename**: Show contents of a long file (press q to quit).

Part 3: More Commands — Creating and Managing Files

- **mkdir folder**: Create a new directory.
- **touch file.txt**: Create an empty file.
- **rm file.txt**: Delete a file.
- **rm -r folder**: Delete a folder and its contents.
- **mv old new**: Move or rename a file.
- **cp file1 file2**: Copy a file.

Part 4: Advanced Topics — Hidden Files, Permissions, and iCloud

• Hidden files begin with a dot (.). Use 'ls -a' to see them. • File permissions: use 'ls -l' to see who can read, write, or execute a file. • iCloud: macOS often syncs Desktop and Documents with iCloud. These files are still accessible from the command line.

Part 5: Practice Exercises

1   Navigate to your home directory and create a folder named 'hello_terminal'.

2   Inside it, create a file called notes.txt, then rename it to my_notes.md.

3   Copy it to backup_notes.md, then delete both files.

4   Create a workspace folder for this course, add a file intro.txt, write text with echo, and display it with cat.