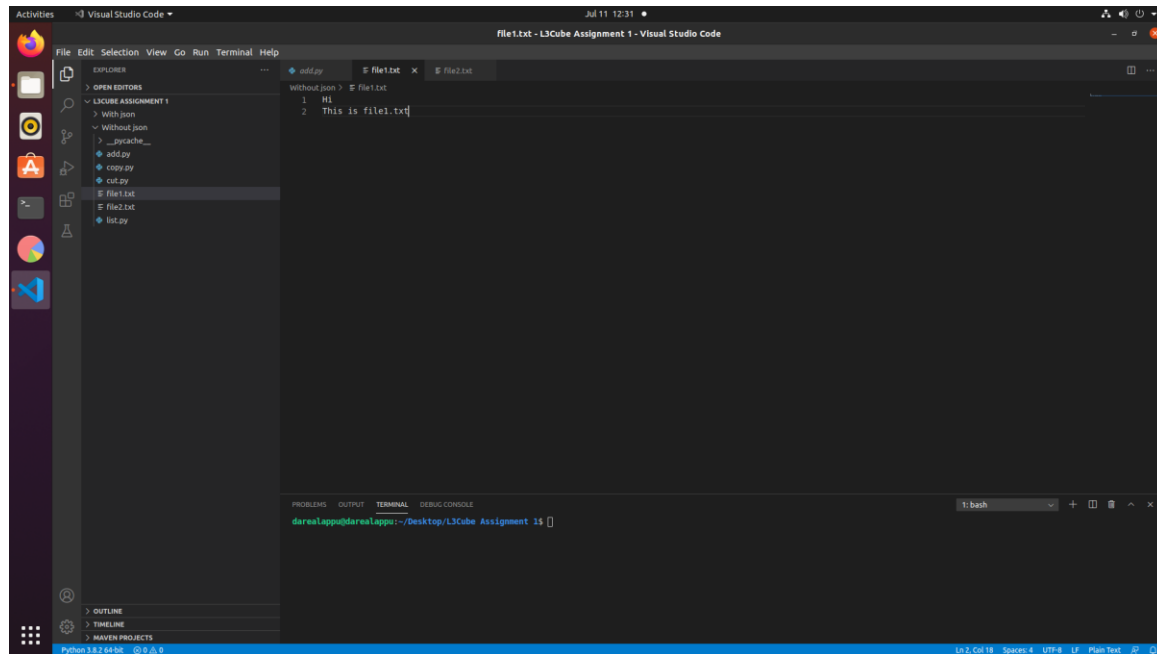


L3Cube Assignment 1 Snapshots

Original Files:

file1.txt

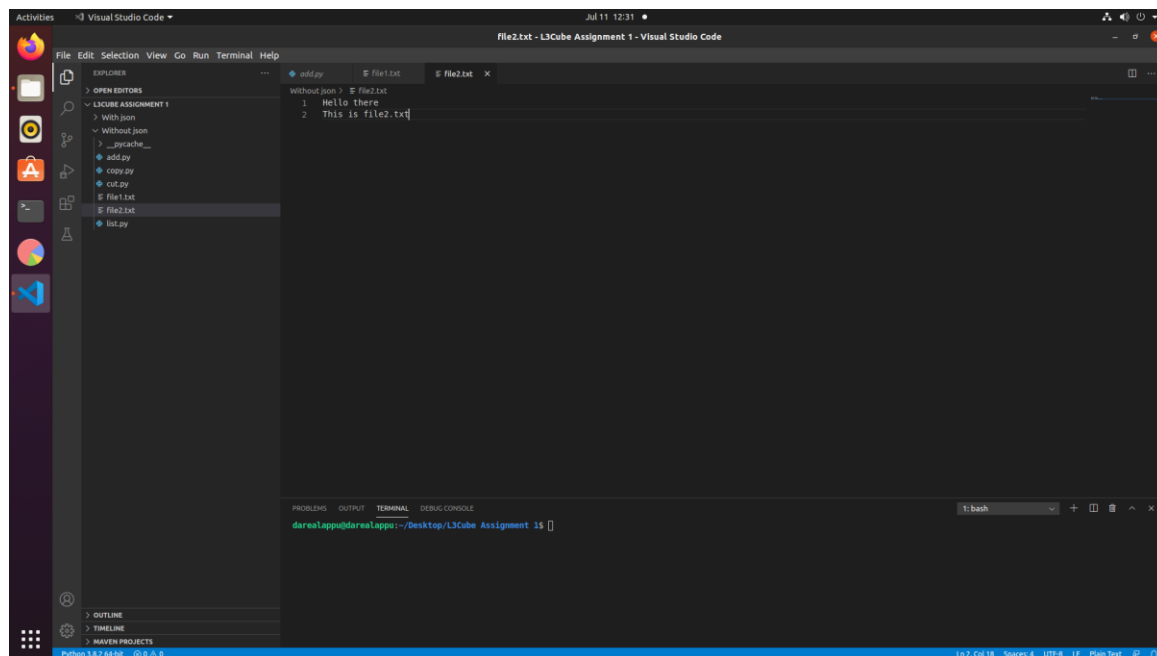


A screenshot of the Visual Studio Code editor interface. The title bar reads "File1.txt - L3Cube Assignment 1 - Visual Studio Code". The Explorer sidebar on the left shows a project named "L3CUBE ASSIGNMENT 1" with a folder structure including "Without json", "With json", and "___pycache___". Below this, a list of files is shown: "add.py", "copy.py", "cut.py", "file1.txt", "file2.txt", and "list.py". The main editor window displays "file1.txt" with the following content:

```
Without json > file1.txt
1 H1
2 This is file1.txt
```

The bottom status bar indicates "Python 3.8.2 64-bit" and "Ln 2, Col 18". The bottom right corner shows "Ln 2, Col 18 | Spaces: 4 | UTF-8 | LF | Plain Text".

file2.txt



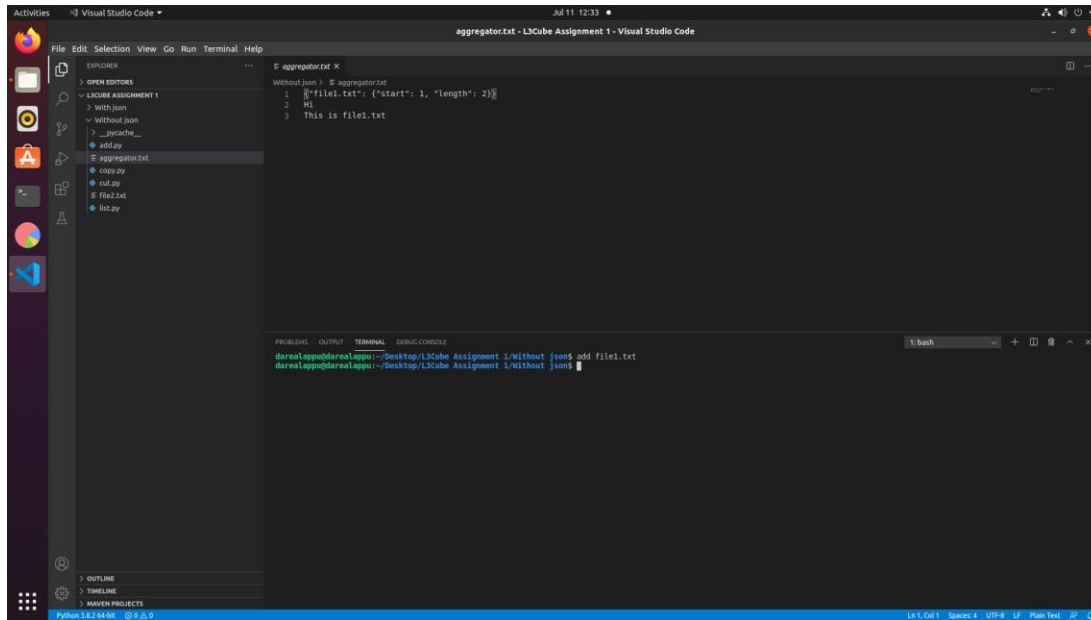
A screenshot of the Visual Studio Code editor interface. The title bar reads "file2.txt - L3Cube Assignment 1 - Visual Studio Code". The Explorer sidebar on the left shows the same project structure as the previous screenshot. The main editor window displays "file2.txt" with the following content:

```
Without json > file2.txt
1 Hello there
2 This is file2.txt
```

The bottom status bar indicates "Python 3.8.2 64-bit" and "Ln 2, Col 18". The bottom right corner shows "Ln 2, Col 18 | Spaces: 4 | UTF-8 | LF | Plain Text".

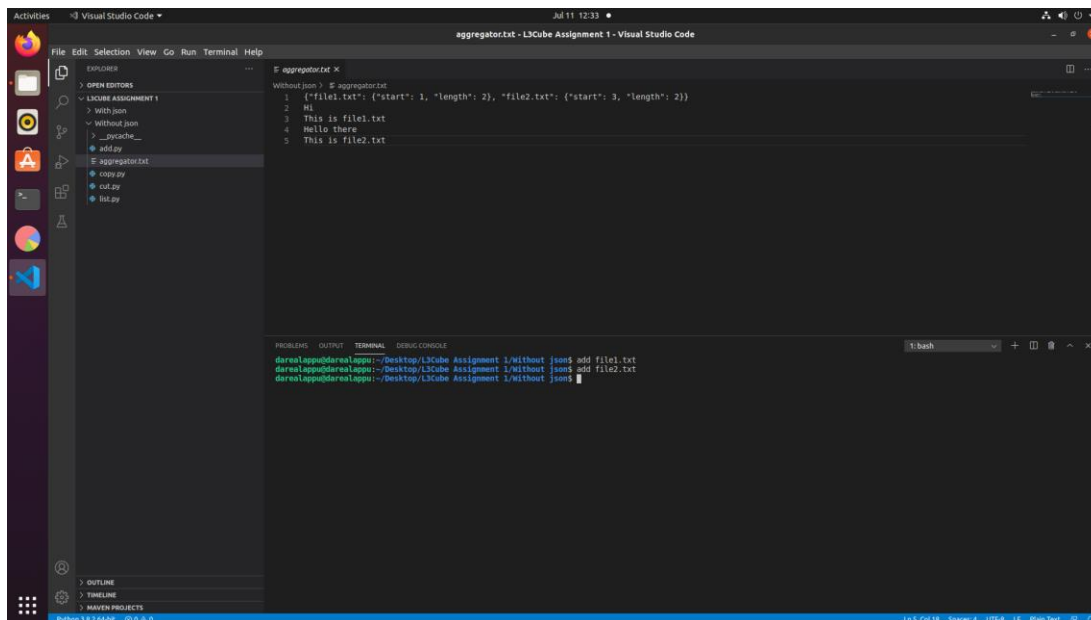
Test Case 1 - Adding file1.txt

- aggregator.txt created
- file1.txt deleted



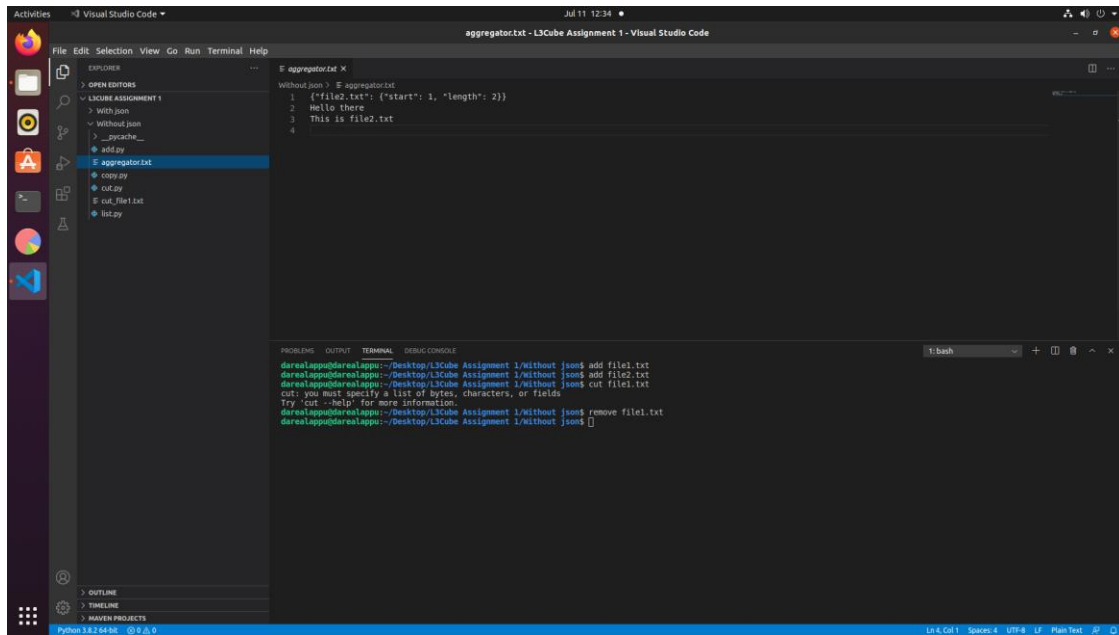
Test Case 2 - Adding file2.txt

- aggregator.txt modified
- file2.txt deleted



Test Case 3 – Cut file1.txt

aggregator.txt modified



The screenshot shows the Visual Studio Code interface with the file `aggregator.txt` open in the editor. The file contains the following JSON content:

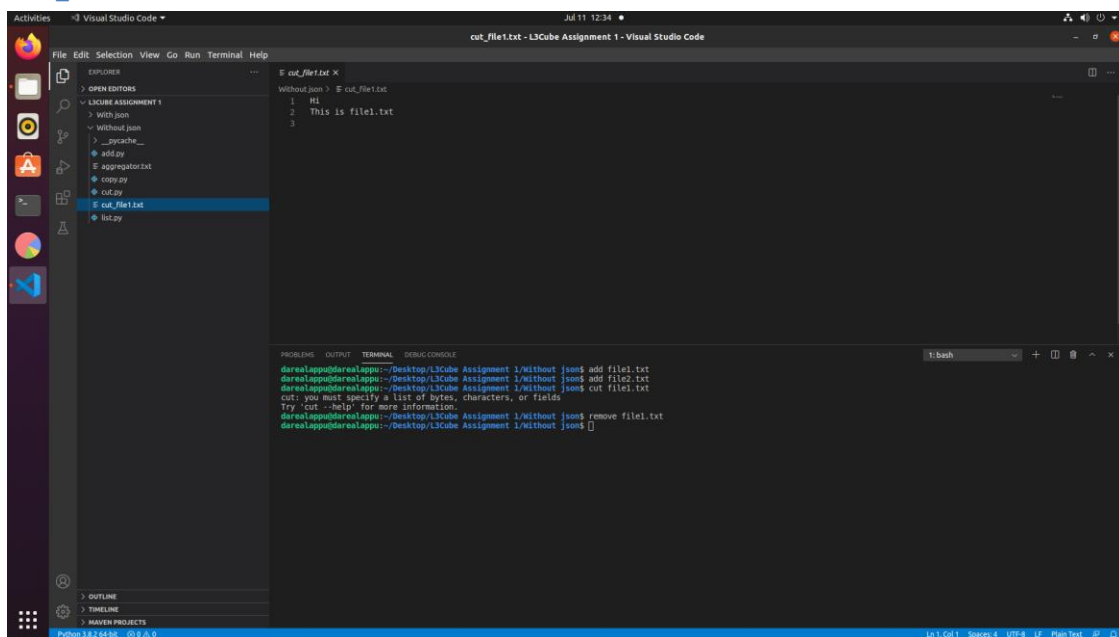
```
Without json > E aggregator.txt
1  {"file2.txt": {"start": 1, "length": 2}}
2  Hello there
3  This is file2.txt
4
```

The Explorer sidebar on the left shows the project structure for "L3Cube Assignment 1", including files like `Without json`, `With json`, `__pycache__`, `add.py`, `copy.py`, `cut.py`, `cut_file1.txt`, and `test.py`. The `aggregator.txt` file is currently selected.

The bottom panel shows the TERMINAL with a bash shell. The command history includes:

```
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ add file1.txt
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ add file2.txt
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ cut file1.txt
cut: you must specify a list of bytes, characters, or fields.
Try 'cut --help' for more information.
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ remove file1.txt
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$
```

cut_file1.txt created



The screenshot shows the Visual Studio Code interface with the file `cut_file1.txt` open in the editor. The file contains the following text:

```
Without json > E cut_file1.txt
1  H1
2  This is file1.txt
3
```

The Explorer sidebar on the left shows the project structure for "L3Cube Assignment 1", including files like `Without json`, `With json`, `__pycache__`, `add.py`, `copy.py`, `cut.py`, `cut_file1.txt`, and `test.py`. The `cut_file1.txt` file is currently selected.

The bottom panel shows the TERMINAL with a bash shell. The command history includes:

```
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ add file1.txt
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ add file2.txt
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ cut file1.txt
cut: you must specify a list of bytes, characters, or fields.
Try 'cut --help' for more information.
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$ remove file1.txt
darealapp@darealapp:~/Desktop/L3Cube Assignment 1/Without json$
```

copy_file2.txt created

The screenshot shows the Visual Studio Code interface. The Explorer sidebar on the left displays the file structure, including a folder named 'copy_file2.txt' containing files like 'add.py', 'aggregator.txt', 'copy.py', 'cut.py', 'cut_file1.txt', and 'list.py'. The main editor window shows the content of 'copy_file2.txt', which contains the text: 'Without json > I copy_file2.txt', '1 Hello there', '2 This is file2.txt', '3'. The Terminal at the bottom shows the command 'cat copy_file2.txt' and its output: 'Without json > I copy_file2.txt', '1 Hello there', '2 This is file2.txt', '3'.

Test Case 5 – List files present in aggregator.txt

Files present listed in the terminal

The image shows a screenshot of the Visual Studio Code editor interface. At the top, the title bar reads "aggregator.txt - L3Cube Assignment 1 - Visual Studio Code". The main editor window displays the content of "aggregator.txt", which is a JSON object:

```
{ "file2.txt": { "start": 1, "length": 2} }
Hello there
This is file2.txt
```

On the left, the Explorer sidebar shows a file tree. The project is named "L3CUBE ASSIGNMENT 1". Inside this project, there are two sub-folders: "With json" and "Without json". Under "Without json", there are files: "__pycache__", "add.py", "aggregator.txt" (which is currently selected and highlighted in blue), "copy.py", "copy_file2.txt", "cut.py", "cut_file1.txt", and "test.py".
At the bottom of the window is the TERMINAL panel. It shows a series of commands and their outputs in a shell environment. The commands and outputs are:

```
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$ add file1.txt
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$ add file2.txt
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$ cut file1.txt
cut: you must specify a list of bytes, characters, or fields
try 'cut --help' for more information.
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$ remove file1.txt
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$ copy file2.txt
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$ list
file2.txt
darealappu@darealappu:~/Desktop/L3Cube Assignment 1/Without json$
```

The status bar at the very bottom of the window shows "Python 3.8.2 64-bit" on the left and "Ln 4, Col 1" on the right.

Notes

1. We have created Linux commands for the operations add, cut, copy and list.
2. Add, Cut and Copy accept one command line argument
3. Cut command already exists in linux, we have named the command **remove** instead.
4. The first line of aggregator.txt is the metadata stored in json format

Setting Up Linux Commands

1. Place the files in `./linux-commands` in `/bin` (Root credentials may be required)
2. Run the following commands in the terminal
 - a. `sudo chmod +x /bin/add`
 - b. `sudo chmod +x /bin/copy`
 - c. `sudo chmod +x /bin/remove`
 - d. `sudo chmod +x /bin/list`