RIPHAH INTERNATIONAL UNIVERSITY, ISLAMABAD

Lab # 2

Bachelors of Computer Science – 6th Semester

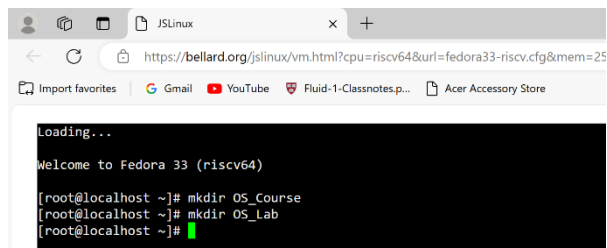**Subject: Operating System**

Submitted to: Ms. Kausar

Submitted by: Ayesha Noor _ 41379
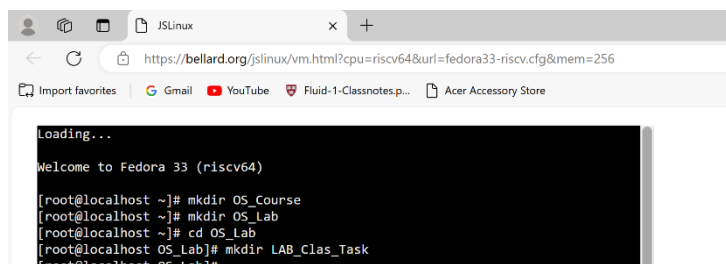
Date of Submission: 02- Sep -2024

TASK:1

- Start by creating two directories named OS_Course and OS_Lab.
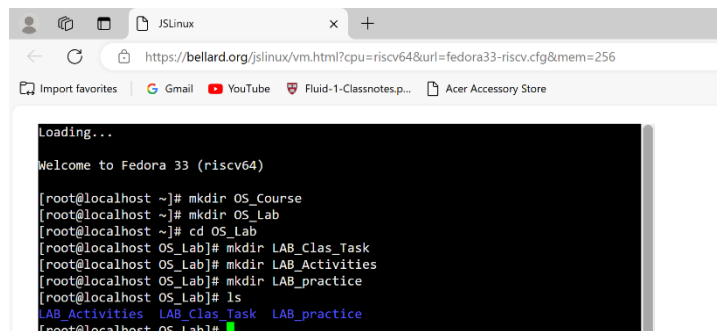
- After creating these directories, switch to the OS_Lab directory.

- Within OS_Lab, create three more directories named **LAB_Class_Task, LAB_Activities, and Lab_Practice**.

- Go into the **Lab_Practice** directory and create a file named example.cpp.

- This file should be empty and will be used for practice later.
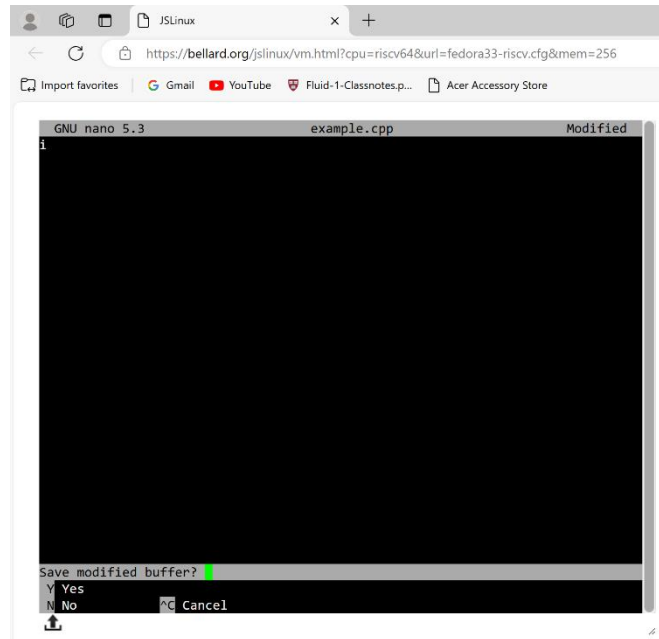
- Move back to your home directory.
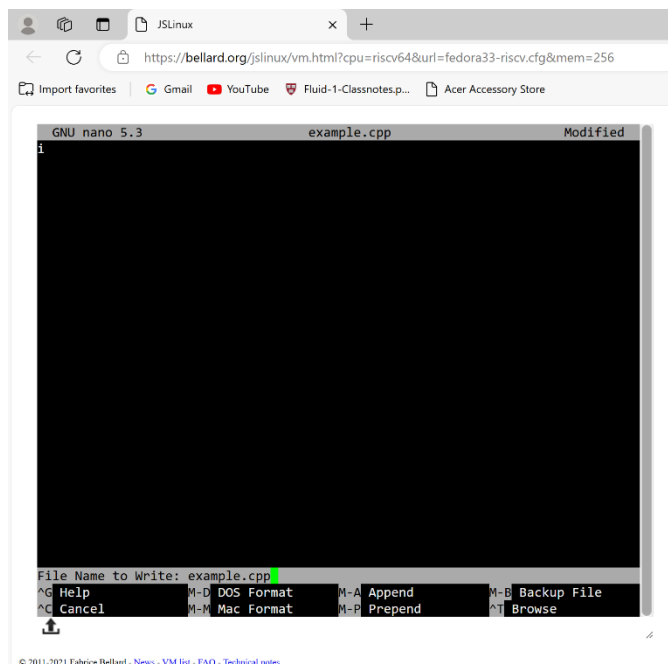
TASK: 2

Absolute Path:

- An absolute path specifies the location of a file or directory from the root directory. It provides the complete path, starting from the root (/ on Unix/Linux or the drive letter like C:\ on Windows), and lists each directory leading to the target file or directory.
- **Example:**
  - On a Windows system: **C:\Users\User\Documents\LAB_Activities**

```
[root@localhost OS_Lab]# pwd
/root/OS_Lab
[root@localhost OS_Lab]#
```

Relative Path:

- A relative path specifies the location of a file or directory in relation to the current directory. It does not start from the root directory but rather from the directory you are currently working in.
- **Example:**
  - If you are in the **Lab_Practice** directory and want to access a file in **LAB_Activities:**

```
LAB_Activities  LAB_Clas_Task  LA
[root@localhost OS_Lab]#
```

Current Directory: Lab_Practice

To access the **LAB_Activities** directory from **Lab_Practice** using a **relative path**, you would move up one level to the parent directory and then down into the **LAB_Activities** directory. The relative path would be:

Cd ..
Cd LAB_Activities

```
[root@localhost LAB_practice]# cd ..
[root@localhost OS_Lab]# ls
LAB_Activities  LAB_Clas_Task  LAB_practice
[root@localhost OS_Lab]#
```

TASK: 3

When you turn off your computer by holding the power button, it performs a hard shutdown, cutting power immediately. However, when you turn it back on, the quick startup happens because of a feature like Fast Startup or Hibernate. Instead of going through a full boot process, the computer resumes from a saved system state stored on the disk (called a hiberfile). This allows the system to restore everything, including open applications and settings, quickly, bringing you directly to the login screen or desktop without the usual delays of a full reboot.