Installation:-

Install Git:- Sudo apt install git
Check Versions:- gcc --version
python --version

javac –version (javac 1.8.0)

Java install:- sudo apt install (version name)

Git Clone: git clone (link)

After downloading vs code in that exact folder

Sudo dpkg -i (tab)

Uninstall old java version:- sudo apt-get autoremove (version)

Assignment 1:- Implement multi-threaded client/server Process communication using RMI.

Open terminal

1. javac Server. java

2.java Server

Open 2nd terminal

1.javac Client.java

2.java Client

Assignment 2:- Develop any distributed application using CORBA to demonstrate object brokering

Open 1st terminal

1.idlj -fall ReverseModule.idl

2. javac *.java ReverseModule/*.java

3.tnameserv - ORBInitial Port 3000

Open 2nd terminal

1. java ReverseServer - ORBInitialPort 3000 - ORBInitialHost localhost

Open 3rd terminal

1. java ReverseClient -ORBInitialPort 3000 -ORBInitialHost localhost

Assignment 3:- Develop a distributed system, to find sum of N elements in an array by distributing N/n elements to n number of processors MPI or OpenMP. Demonstrate by displaying the intermediate sums calculated at different processors.

Open 1st terminal

- 1. sudo apt install build-essentials
- 2. sudo apt install mpich
- 3. mpicc arr_sum.c -o sum
- 4. mpirun -np 4 ./mpi_sum

Assignment 4:- Implement Berkeley algorithm for clock synchronization.

Open 1st terminal

1. python3 server.py

Open 2nd terminal

1. python3 client.py

Assignment 5: Implement token ring based mutual exclusion algorithm

Open terminal

1. python3 token-ring.py

Assignment 6:- Implement Bully and Ring algorithm for leader election

Open terminal

1. python3 bully_ring.py

Assignment 7:- Create a simple web service and write any distributed application to consume the web service.

Open 1st terminal

- 1. open cmd prompt
- 2. npm install
- 3. cd server
- 4. npm install
- 5. npm install nodemon
- 6. node index.js

Open 2nd terminal

1. npm start app.js

Open Browser:

1. enter url :- localhost:3000/users