Distributed System Laboratories

IOE Pulchowk Campus-2022,

Instructions to the Students

Lab Instructors: …….

Instructions:

1. Student can join the lab session and continue the lab activities even if concerned lecturer/instructor may not be presented on the lab session.
2. Deliverables: One/Two page Lab work Summary sheet for each lab to be submitted in Individual/Group, 8-10 Page for Case Study Report.
3. Marks Distribution: Lab Works: 8, project/case-study works/Report:10, Viva/Presentation: 5, Assignment/Performance: 2, Total: 25 Marks

LAB Activities

1. Tutorial practice: Unix/Linux operating system with process manipulation (Individual).
2. Implement RMI to add two numbers. (Individual)
3. ONOS-Distributed OS tutorial and implement distributed application. (Individual) – download OVA ONOS tutorial VM. Follow steps from: https://wiki.onosproject.org/display/ONOS/Basic+ONOS+Tutorial
4. Tutorial and Implementation of HDFS, implementation of Sun-NFS. (Group)
5. Implement Lamport's Timestamp.(Group)
6. Implement any one algorithm for distributed election. (Group)
7. Implement algorithm for two phase distributed commit (Group)
8. Implement algorithm for byzantine generals problem (Group)

Lab instructors will provide the deadline of report submission of each lab activities on an ongoing basis during the running semester.