Savitribai Phule Pune University

M.Sc.(Computer Science)

Progress Report for CS-651-MJP : Full Time Industrial Training (IT)

(This Progress report is to be submitted monthly to the college guide/Mentor)

Name of College	Rajmata Jijau Shikshan Prasarak Mandal's ARTS, COMMERCE & SCIENCE COLLEGE
Roll No./ID and Name of Student	ANANTU AJAYAN VISHWAKARMA
Date of Report Submission	02/04/2025
Duration of Report (From date — To date)	01/01/2025 TO 31/03/2025
Name of Organization	Tata Consultancy Services
Date of Joining in the organization	25/12/2024
Name of Industry Guide/Supervisor	Ms. Sonali Parab
Name of College Guide/Mentor	Prof. Swapnil More Sir

1. Introduction

The objective of this internship was to gain practical experience in Linux system administration, enhance my technical skills, and understand real-world IT operations.

As a Linux Administrator Intern, my role involved supporting the IT team by managing Linux servers, performing system configurations, monitoring performance, handling backups, and assisting with network tasks. This experience helped me apply theoretical knowledge in a professional environment and develop key skills in system management and troubleshooting.

2. Work Undertaken

- **Server Installation and Configuration:**
  Installed and configured Linux servers, including setting up LAMP (Linux, Apache, MySQL, PHP) stacks for web hosting environments.

- **System Monitoring and Maintenance:**
  Utilized tools like Nagios and Zabbix to monitor server performance, manage system logs, and ensure uptime.

- **User Management:**
  Handled user account creation, permissions management, and security settings using commands like adduser, passwd, and chmod.

- **Backup and Recovery:**
  Implemented backup strategies using tools like rsync and automated scripts for regular data backups.

3. Learning and Skill Development

Technical Skills:

- Advanced knowledge of Linux commands and shell scripting.

- Proficiency in server configuration, system monitoring, and network management.

- Hands-on experience with virtualization tools like VMware.

Problem-Solving:
Gained insights into diagnosing and resolving system performance issues effectively.

Soft Skills:
Improved my communication, teamwork, and time management skills while collaborating with IT teams.

4. Challenges Faced

- **Complex System Errors:**
  Some server configuration issues were difficult to diagnose due to limited documentation.
  Strategy: I collaborated with senior admins, consulted online forums, and practiced troubleshooting methods.

- **Time Management:**
  Balancing multiple tasks with deadlines was challenging.
  Strategy: I prioritized tasks using to-do lists and time-blocking techniques.

5. Achievements and Contributions

- Developed a basic script to automate routine backup tasks, reducing manual workload by 30%.

- Contributed to improving system performance through proactive monitoring and issue resolution.

6. Future Plan

- **Enhance My Skills:**

  - Learn advanced Linux security measures, including SELinux and firewall management.

  - Gain proficiency in automation tools like Ansible.

- **Address Areas for Improvement:**

  - Improve my understanding of complex network protocols.

  - Work on advanced troubleshooting techniques for system and network issues.

- **Action Plan:**

  - Participate in hands-on projects involving system security and automation.

  - Regularly review and update my technical documentation for better clarity and efficiency.

Signature: Signature:

Date: Date:

Name: Name:

Industry Guide/Mentor   **College Guide/Mentor**