Practical Workbook
CS-219
Computer Engineering Workshop

Name : _____

Year : _____

Batch : _____

Roll No : _____

Department: _____

Department of Computer & Information Systems Engineering
NED University of Engineering & Technology

Practical Workbook
CS-219
Computer Engineering Workshop

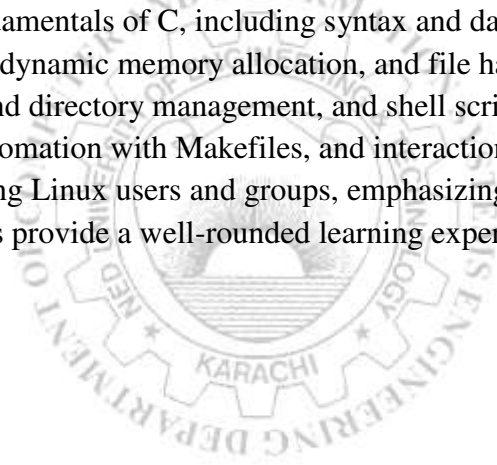
INTRODUCTION

This workbook has been compiled to assist the conduct of practical classes for CS-219 Computer Engineering Workshop. Practical work relevant to this course aims to guide you through various aspects of C programming and Linux system administration. This workbook is tailored to provide hands-on experience and practical knowledge in mastering C programming fundamentals, exploring advanced topics, and delving into essential Linux system tasks.

The Course Profile of CS-219 Computer Engineering Workshop lays down the following Course Learning Outcome:

Attain hands-on experience with contemporary technologies of Computer Engineering (C3, PLO-5).
All lab sessions of this workbook have been designed to assist the achievement of the above CLO. A rubric to evaluate student performance has been provided at the end of the workbook.

These labs cover a comprehensive range of topics in C programming and Linux system administration. Students will begin with the fundamentals of C, including syntax and data structures, progressing to advanced concepts like pointers, dynamic memory allocation, and file handling. The Linux-focused labs teach essential commands, file and directory management, and shell scripting. Additionally, participants will explore debugging tools, automation with Makefiles, and interactions with the Linux file system. The final labs concentrate on managing Linux users and groups, emphasizing security and access control. Overall, these hands-on exercises provide a well-rounded learning experience for both C programming and Linux system tasks.



CONTENTS