

| ID | Email Address | Student Name | Registration No. | Name of all other Group Members (Column 4) | Registration Numbers of all other Group Members (Column 5) | Section | Problem Statement | Description |
|--------------------|------------------------|---------------------|------------------|--|--|---------|--|---|
| 11-1-2025 12:02:49 | meenubhavakhi4@gmail | Anubhav Akhil | 12411224 | Anubhav Akhil, Sonam Khurana, Yuvraj Pratap Singh | 12411224, 12411330, 12410511 | K24DP | Real-Time Process Monitoring Dashboard | Create a graphical dashboard that displays real-time information about process states, CPU usage, and memory consumption. The tool should allow administrators to manage processes efficiently and identify potential issues promptly. |
| 11-1-2025 18:21:01 | kaushik15singh20@gmail | Kaushiki Singh | 12409334 | Abhishek Kumar, Raja Rajeswari Bontha, Kaushiki Gorm | 12414062, 12407066, 12409334 | K24DP | Energy-Efficient CPU Scheduling Algorithm | Develop a CPU scheduling algorithm that minimizes energy consumption without compromising performance. The algorithm should be suitable for mobile and embedded systems where power efficiency is critical. |
| 11-1-2025 19:23:55 | shreyask3006@gmail | Shreyas KS | 12407112 | Pracheth Reddy Devarapu, Aman Raj Gupta | 12410108, 12410262 | K24DP | Scalable Thread Management Library | Design a thread management library that supports efficient creation, synchronization, and termination of threads. The library should be scalable to handle thousands of threads concurrently, suitable for high-performance computing applications. |
| 11-2-2025 19:33:30 | shithakur30@gmail | Shivam Thakur | 12411347 | Shivam Thakur, Akshil Chandel, Nandani Bhatti | 12411347, 12407795, 12409467 | K24DP | Automated Deadlock Detection Tool | Develop a tool that automatically detects potential deadlocks in system processes. The tool should analyze process dependencies and resource allocation to identify circular wait conditions and suggest resolution strategies. |
| 11-2-2025 20:32:50 | punushothamreddy1 | Punushotham | 12415521 | Punushotham, Sai Siddharth, Ram Charan Teja | 12415521, 12412149, 12407073. | K24DP | Secure Authentication Module for Operating Systems | Create a robust authentication module that integrates with existing operating systems to enhance security. The module should support multi-factor authentication and protect against common vulnerabilities like buffer overflows and trojans. |
| 11-3-2025 15:17:08 | jaivardhan.rathore20 | Jaivardhan Singh Ra | 12417323 | Jaivardhan Singh Rathore, Abhinav Rawat, Nikhil Mishra | 12417323, 12412107, 12410555 | K24DP | Efficient Page Replacement Algorithm Simulator | Design a simulator that allows users to test and compare different page replacement algorithms (e.g., FIFO, LRU, Optimal). The simulator should provide visualizations and performance metrics to aid in understanding algorithm efficiency. |
| 11-3-2025 17:32:29 | gursimranhalsa1@ | Gursimran Singh | 12412116 | Sahil, kunal Kishore | 12410048, 12412431 | K24DP | Distributed File System with Fault Tolerance | Develop a distributed file system that ensures data availability and integrity across multiple nodes. The system should incorporate fault tolerance mechanisms to handle node failures gracefully. |
| 11-3-2025 17:59:50 | sahilmore253@gmail | Sahil santosh more | 12409526 | Sahil santosh more, nitin sheoran, keshav mukherjee | 12409526, 12410902, 12407190 | K24DP | Comprehensive Inter-Process Communication Framework | Create a framework that facilitates efficient inter-process communication (IPC) using various methods such as pipes, message queues, and shared memory. The framework should include security features to prevent unauthorized data access. |
| 11-3-2025 18:03:12 | nishiraj22989@gmail | Rishi Raj | 12405681 | Arosh Singh, Rajan Kushwaha | 12410426, 12405087 | K24DP | AI-powered performance Analyzer for OS Processes | Build a tool leveraging AI to analyze the performance of system processes in real-time. Highlight bottlenecks, suggest optimizations, and forecast future resource requirements. |
| 11-3-2025 18:31:02 | upendrasinghsoni1 | Upendra Singh | 12417905 | Aryan Gupta, Anupam Kumar | 12416450, 12404810 | K24DP | Graphical Simulator for Resource Allocation Graphs | Create a visual tool to simulate resource allocation graphs and analyze deadlock scenarios interactively. |
| 11-3-2025 18:31:15 | kumarsubham3303 | Subham Kumar | 12413067 | Ritesh Singh, Lucky kuma | 12416975, 12413645 | K24DP | Real-Time OS Security Event Logger | Design a logger that monitors and records OS-level security events, providing insights into potential vulnerabilities. |
| 11-3-2025 20:05:52 | as.anuragdingh.1301 | Anurag Singh | 12408188 | Akshay Verma | 12409241 | K24DP | Adaptive OS Scheduler for Real-Time Systems | Create an adaptive OS scheduler that dynamically adjusts priorities in real-time systems based on workload changes and deadlines. |
| 11-3-2025 20:17:24 | chiragshenai629@gmail | Chirag | 12409735 | Manan, Sneha | 12407614, 12418796 | K24DP | Real-Time Process Synchronization Analyzer | Create a tool to analyze and resolve process synchronization issues in multi-threaded applications. |
| 11-3-2025 20:32:57 | klour5585@gmail | Kulwinder Kour | 12408831 | Pawani Jaiswal, Hemani | 12411194, 12408438 | K24DP | AI-Powered Directory Management System | Build an AI-based directory management system that categorizes and organizes files efficiently. |
| 11-3-2025 21:11:59 | aadhyarutia909@gmail | Aditya Rudra kala | 12407794 | Rahul, Rajdeep Singh | 12409923, 12409030 | K24DP | Efficient Garbage Collection in OS | Design an optimized garbage collection mechanism for memory management in modern OS environments. |
| 11-3-2025 21:44:57 | aadhivivek@gmail | Aadhi vivek | 12417574 | Anan, Aadhi, Sundaram | 12410336, 12417574, 12418864 | K24DP | AI-Powered Deadlock Detection System | Design an AI-driven system to predict, detect, and resolve deadlocks in real-time. |
| 11-3-2025 18:49:57 | kommansapalakaasr | K.Aakash Chandra | 12407177 | S Pranay , Y Bhavish | 12407113 , 12406399 | K24DP | Real-Time Memory Allocation Tracker | Build a tool that visualizes memory allocation in real-time, showcasing paging and segmentation. |
| 11-5-2025 21:54:05 | ayushkumar05627@ | Ayush Kumar | 12410349 | Priyanshu Pal, Pragya | 12409162, 12409372 | K24DP | Secure Inter-process Communication Framework | Develop a secure interprocess communication framework to prevent unauthorized access. |
| 11-6-2025 0:48:50 | fayazparjeen17@gmail | Parjween Fayaz Sad | 12417178 | Parikshit Dogra, Saksham Sharma | 12417984, 12413874 | K24DP | AI-Enhanced System Call Optimization | Implement AI techniques to optimize system call processing and reduce latency in OS. |
| 11-6-2025 10:17:21 | harshitgera4@gmail | Harshita Gera | 12407899 | Pujan Choudan , Aashri Sarraf | 12414959 , 12409442 | K24DP | AI-Based Disk Scheduling Algorithms | Implement and compare AI-based approaches to disk scheduling in operating systems. |
| 11-6-2025 13:24:26 | yashbhele2005@gmail | Yash Bhele | 12415001 | Rahul kumar singh , Poja Talle | 12413006 , 12409118 | K24DP | Smart CPU Scheduling Visualizer | Build a simulator where users can visualize CPU scheduling (FCFS, SJF, Priority, RR) with colored Gantt charts and calculate average waiting and turnaround times. |