SR#	STUDENT NAME	PRESENTATION TOPIC OS/CAAL		REMARKS
1	Siraj Dujana Muhammad Iqbal Shagufta	**Virtual Memory** Demand Paging, Copy-on-Write, Page Replacement, Allocation of Frames, Thrashing	ARM Processor Introduction to Array and String Application of array Two-dimensional array	Monday 22/4 CAAL Wednesday 08/5 OS
2	Hanseeka Abdul Qadeer Odhano Kashish Mandhan	**Threads & Concurrency** Multicore Programming, Multithreading Models, Thread Libraries, Implicit Threading, Threading Issues, Operating-System Examples	Processor Organization Register Organization Instruction Cycle Instruction Pipelining	Monday 29/4 CAAL Wednesday 01/5 OS
3	Mashooque Ali Pranjal Mandhan Talha Waheed	**Memory Management** Contiguous Memory Allocation, Paging, Structure of the Page Table, Swapping.	Direction Flag Sting functions Moving String Storing String Load String Scan String Compare String	Thursday 2/5 CAA Wednesday 08/5 OS
4	Muhammad Aaqib Adnan Ali	Operating-System Design Operating-System Structure, Building and Booting **API**	CISC The Logic, Shift and Rotate instructions in AL AND, OR & XOR instructions NOT instruction in AL	Monday 29/4 CAAL Wednesday 08/5 OS
	Shivani Dawani	Kernel Types & Architecture Kernel Data Structures	RAID & RISC	Monday 22/4 CAAL Tuesday 23/4 OS
5	Muhammad Zain Nisha Novlani Muhammad Mubeen	**Synchronization Tools** The Critical-Section Problem, Peterson's Solution, Hardware Support for Synchronization, Mutex Locks, Semaphores, Monitors.	PCI in CA TEST instruction in AL Shift Instruction(Left & Right) Rotate Instructions	Thursday 2/5 CAA Wednesday 01/5 OS

6	Manthar Ali Prena Mandhan Abdul Qudoos	**CPU Scheduling** Real-Time CPU Scheduling, Operating-System Examples, Algorithm Evaluation	Introduction to BIOS and DOS routines File Processing and management in AL	Monday 29/04 CAAL Tuesday 7/5 OS
7	Noor Mustafa Aman Raj Mehak	**CPU Scheduling** Scheduling Criteria, Scheduling Algorithms, Thread Scheduling, Multi-Processor Scheduling,	The Application of STACK Push & Pop operations Understand the Procedure CALL & RET statements Examples of Stack & Procedures	Thursday 2/5 CAA Tuesday 7/5 OS
8	Malik Qadeer Faisal Raheem Muhammad Younis Marvi Baloch	**Deadlocks** System Model, Deadlock in Multithreaded Applications, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock	An example of JUMP Conditional & Unconditional JUMP The JMP instruction Branching and Looping structure Introduction to STACK application	Monday 22/4 CAAL Wednesday 01/5 OS
9	Sagar Chhabriya	**Processes** Process Concept, Process Scheduling, Operations on Processes, Inter process Communication, IPC in Shared-Memory Systems, IPC in Message-Passing Systems, Examples of IPC Systems, Communication in Client– Server Systems	The Arithmetic and Logic Unit Integer Representation Integer Arithmetic Floating point representation Floating point arithmetic	Monday 22/4 CAAL Tuesday 30/4 OS

Note: Instructions.

- Dress Code Important
- Slides of Each group should not exceed 20
- Group time will be 20 Minutes
- Divide your work and then separately make slides accordingly and in last merge all and present
- There will be a cross questioning
- The CAAL topics that includes the AL topics a group must have to perform task or present LAB task too of topic area.
- Attendance is mandatory