

Gyanmanjari Innovative University, Bhavnagar

Department of Computer Engineering Diploma (Premium Program)

Report on

Expert talk on

Memory Magic: Arrays & Pointers

Date: 13/09/2025

Time: 11:00 AM - 01:00 PM

Venue: SF-22-A

| No. of Student | 8 |
|----------------------|---|
| Department | Computer Engineering |
| Semester | Diploma 1 st (PREMIUM PROGRAM) |
| Faculty Co-Ordinator | Prof. Pruthviraj V. Parmar |

About Expert

Ms. Disha Shukla, currently working with Nova Techset, is an experienced professional with a strong background in programming fundamentals, memory management, and applied computer science. Over the years, she has actively contributed to academic and industry projects, earning recognition for her clarity in teaching and her ability to simplify technical concepts.

Her career reflects a fine blend of industry knowledge and academic passion. She has delivered several talks and sessions aimed at equipping young learners with practical programming skills that complement their theoretical studies. Known for her student-friendly approach, she ensures that even the most challenging topics become accessible to beginners.

Ms. Shukla firmly believes in the philosophy, "Clarity in the basics builds confidence for the future." She encourages learners to focus on fundamental concepts, as they form the stepping stones to mastering advanced programming. Through this online expert talk, she brought her expertise directly to Diploma IT 1st semester students, creating an engaging and impactful learning experience.

Objective of Talk

The primary objective of this online session was to introduce students to the core concepts of **arrays and pointers in C programming**. These topics often appear difficult to beginners, but they are crucial for understanding how memory is allocated, accessed, and optimized in programming. By breaking down these concepts step by step, the session aimed to help students overcome fear and confusion while developing confidence in their coding abilities.

Another important objective was to **connect classroom theory with practical applications**. The session showcased how arrays and pointers are used in real-world IT scenarios, from handling data structures to building efficient software solutions. This approach encouraged students to not just memorize concepts but to appreciate their practical significance.

Lastly, the talk was designed to motivate students to **think beyond the textbook**. By using real examples, interactive explanations, and relatable coding situations, Ms. Shukla inspired students to explore programming independently. This aligns with the Premium Program's vision of holistic learning, ensuring that Diploma IT students are equipped with the right mindset and skills from their very first semester.

Key Insights & Takeaways

One of the key insights students gained from the online session was the realization that **arrays** and pointers are not isolated topics but interconnected tools. Arrays provide structured storage, while pointers give direct control over memory locations. Together, they empower programmers to write more efficient and optimized code.

The session also shed light on the **importance of memory management in IT applications**. Students learned how mastering these fundamentals plays a vital role in building larger systems like operating systems, compilers, and embedded software. This broadened their perspective, helping them see how classroom learning connects to industry practices.

Most importantly, students walked away with renewed confidence and curiosity. The online format made the talk accessible and interactive, allowing learners to engage directly with the expert. As Ms. Shukla aptly stated, "Memory is where the magic begins — and arrays and pointers are your keys to mastering it." This session not only strengthened their programming base but also inspired them to **embrace learning with creativity and determination**.

Photographs









