28th June 2025 (Saturday)

The second day of training was an important one, as it marked the beginning of our Java programming foundation. Since the classes were two hours long, the instructor made sure that the session was both conceptually strong and practically engaging. We started with variables, data types, and operators. I learned how to declare variables of different data types such as int, float, char, and boolean, and understood the difference between primitive and non-primitive data types. The mentor also explained how type casting works in Java and demonstrated examples of implicit and explicit type conversions.

After that, we moved to decision-making statements, specifically if-else and switch-case. We were assigned to create small programs to check whether a number was even or odd, find the greatest of three numbers, and display day names based on user input through a switch statement. The instructor encouraged writing multiple versions of each program to compare logic-building techniques.

In the latter half of the class, we covered looping constructs (for, while, and do-while) with multiple examples. I wrote programs for factorial generation, multiplication tables, and reverse number printing. The trainer also explained the importance of nested loops in pattern creation programs. I practiced star-pattern programs that enhanced my understanding of loop nesting. Debugging exercises were also introduced; we deliberately created logical errors to observe compiler messages and fix them.

At the end of the session, the instructor gave an assignment to practice 20 short programs over the weekend covering loops, conditionals, and user input handling. These tasks were intended to strengthen our logic before we moved into arrays and strings in the upcoming week. I left the class with a much clearer sense of how logic, flow control, and problem decomposition work together to build the foundation of any programming language.