3rd July 2025 (Thursday)

The final Java-focused class before starting Android Studio covered exception handling and file I/O. The mentor explained why exceptions occur and how handling them gracefully ensures smooth program execution. We discussed try, catch, throw, throws, and finally blocks in detail. I implemented programs that handled arithmetic exceptions, array index out-of-bounds errors, and null pointer exceptions. This session taught me that real-world applications must handle unexpected runtime errors to avoid crashes — an idea especially crucial for Android apps.

In the second part of the session, we explored file handling in Java, learning to create, read, and write text files using FileReader, FileWriter, and BufferedReader. The mentor showed how data persistence can be implemented through file systems. Although Firebase would be our main backend later, understanding Java file operations gave insight into local data storage mechanisms.

The class concluded with a quick review of all the topics covered in Java: data types, control structures, arrays, strings, OOP, inheritance, polymorphism, and exception handling. We were told that from the next session onward, we would officially begin Android Studio development — starting with basic app structure, XML layouts, and activity lifecycles.