Impact Training Report:

Week: May 5, 2025 – May 9, 2025  
Track: Core Java Practice  
Location: D:\Technical\Skill\src

Repository: <https://github.com/gkushwaha835/Impact-Training>

**Daily Learning & Implementation**

**5th May 2025 — Introduction Day**

Topic Covered:

* History and Evolution of Java
* Features of Java (Platform Independent, OOP, Secure, Robust)
* Installation of IntelliJ IDEA
* How to write, compile, and run Java programs

Insight Gained: Understood Java’s real-world application power and its "Write Once, Run Anywhere" philosophy.

**6th May 2025 — Basics of Conditions & Number Logic**

| File Name | Concept Learned |
| --- | --- |
| ifelse | Control flow: if-else ladder |
| trendynum | Conditional logic + pattern check |
| tarif | Bill calculation using if-else |
| treasure | Puzzle-solving using logical operators |
| Reversed | Number reversal using loop + modulus |
| harry\_potter | Story-based logic building (creative) |

What I Learned:

* Mastered nested conditions and branching logic.
* Gained fluency in handling numeric input and applying logic to solve real-world-like problems.

**7th May 2025 — Looping Constructs and Special Numbers**

| File Name | Concept Learned |
| --- | --- |
| evendoddsum | Using loops to separate even/odd sums |
| SpecialNum | Checking number patterns (special types) |

What I Learned:

* Practiced loop execution and conditional filtering.
* Gained clarity in number classification and logical grouping.

**8th May 2025 — Mastering Number Properties**

| File Name | Concept Learned |
| --- | --- |
| DigiOdd | Digit extraction + odd count |
| CollatzSequence | Mathematical sequence building |
| checknum | Complex condition checking |
| kaprekarNumber | Logic for Kaprekar numbers |
| armstrongNum | Armstrong number check |
| adamnnum | Number reversal + square comparison |
| sumdigituntillsinglenum | Repeated digit sum reduction |
| divisibilityCheck | Divisibility using modulus logic |

What I Learned:

* Implemented mathematical logic and patterns in Java.
* Practiced condition nesting and iterative calculations.

**9th May 2025 — Arrays & Patterns**

| File Name | Concept Learned |
| --- | --- |
| array | Array declaration & initialization |
| sumofarray | Loop-based summation of array elements |
| arraycompatible | Array equality logic (manual check) |
| distinctElement | Finding distinct elements |
| sortarr | Sorting array values without built-ins |
| twoarraysameornt | Manual array matching |
| pattern | Nested loops for pattern printing |

What I Learned:

* Understood how arrays store and manipulate data.
* Applied logic to solve array comparison and sorting tasks.
* Created shape-based patterns using nested loops (stars, numbers).