



# JavaCoreEssentials | Daily Progress

## Day 1 (Saturday - 16/08/25) (3 hours and 20 min)

### Topics Covered:

1. Installation of jdk and intellij
2. Github profile
3. Introduced the [course outline](#)
4. [How java works behind the scene](#)
5. [JDK, JRE, Javac and JVM](#)
6. How java program executes
7. What is main method
8. How to print output in console, the first program in java (Hello Java)
9. Variable and Datatypes in Java
10. User input in Java (Scanner)
11. Convert C++ program into Java
12. Ten home tasks

## Day 2 (Sunday - 17/08/25) (2 hours and 45 min)

### Topics Covered:

1. Github Session (1 hour)
  - a. What is Git and Github?
  - b. Why did we need it?
  - c. The benefits of Github.
  - d. Use of Github as a student.
  - e. How to use it Github and make repo.
  - f. How to connect intellij with Github.
  - g. Uploaded first project on Github.
2. Unary Operator
3. Type Casting in java
4. Enumeration in java
5. Conditional Statements (if else, else if, nested if else, switch, Ternary Operator)
6. Loops (while, do while, for, nested for loop)

## **Day 3 (Monday - 18/08/25)** (3 hours and 15 min)

Topics Covered:

1. Array
2. Garbage Collection (GC)
3. Mutable or Immutable?
4. Default values of data types.
5. Array length, Arrays.toString()
6. How to print complete array
7. For loop, Enhanced for loop
8. 2D Array
9. Solved some problems.
10. Final Keyword

## **Day 4 (Tuesday - 19/08/25)** (1 hour and 30+ min)

Topics Covered:

1. Revision of Days 3
2. Jagged Array
3. Variables in loop are temporary?
4. Class-Tasks
5. HackerRank
6. LeetCode

## **Day 5 (Wednesday - 20/08/25)** (1 hour and 25 min)

Topics Covered:

1. Math Class: min, max, random
2. System Class: in, out, currentTimeMillis()
3. Methods
4. Defining methods: Syntax, return types, parameters.
5. Calling Methods: Passing arguments.
6. void Return Type, Methods that don't return a value.
7. return Keyword: Exiting a method and returning a value.
8. Class-Tasks

## Day 6 (Thursday - 21/08/25) (2 hours)

### Topics Covered:

1. String
2. Class or Primitive Datatype?
3. Mutable or Immutable?
4. Literal and New String obj.
5. **Methods:** `Length()`, `charAt()`, `substring(2)-(0,2)`, `equals()`, `equalsignoreCase()`, `indexOf()`, `contains()`, `endsWith()`, `concat()`, `+`, `toUpperCase()`, `toLowerCase()`, `trim()`, `reverse()`
6. **StringBuilder**
7. **Methods:** `append()`, `insert()`, `delete()`
8. Recursion
9. Some String Tasks
10. Projects assigned.