

Java Methods Project

This assignment will be an open display of methods, using previous solutions.

Objective: Create three functions that run previous solutions with minimal code in **main**.

Instructions:

Select three of the following assignments:

- Conditionals: Simple Console Quiz Game
- Conditionals: Calculator
- While Loops Practice (Part 2)
- For Loops Project: Number Analyzer

Create a flow chart for each problem, defining a clear input and output (if any) along with behaviors inside the function. Next, create a function to solve the problem according to your flow chart, and run said function from main.

Within **main**, you are allowed ONLY to:

- Use scanner to take input
- Call functions to test
- Print solutions

Submission Guidelines:

Take pictures or download pdfs of flow charts, and download java class. Place all in a folder and upload the folder to github. Please name the folder with the assignment name. Link github page here, and submit the downloaded doc as pdf:

Flowcharts:

1. Console Quiz Game (Guessing Game)

Input: User guesses (integers 1-100)

Output: Feedback messages, final success message with attempt count

Behavior:

Generate random number (1-100)

Loop: Get guess → Compare → Give feedback

End when correct guess found

2. Calculator

Input: Two numbers and operation choice

Output: Calculation result

Behavior:

Get numbers and operation

Perform calculation based on choice

Return result

3. Number Analyzer

Input: Count of numbers, then series of numbers

Output: Sum, even count, odd count, total count

Behavior:

Get count → Loop to collect numbers → Analyze each → Display statistics