

The given program is an arithmetic calculator implemented in Java. It allows users to perform basic arithmetic operations such as addition, subtraction, multiplication, and division on two input numbers.

The program utilizes various core Java concepts, including variables, data types, operators, type casting, control statements, classes, objects, access specifiers, and core keywords like final, this, and static.

Upon execution, it presents a menu of operations for the user to choose from: addition, subtraction, multiplication, and division. It then prompts the user to enter two numbers. The user can make a selection by entering the corresponding number.

Based on the user's choice, the program performs the selected operation on the two input numbers using the appropriate method from the Calculator class. The result is displayed on the console.

The program incorporates error handling to handle scenarios such as division by zero. If the user attempts to divide by zero, an error message is displayed, and the result is set to zero.

Overall, the calculator program provides a simple and interactive way for users to perform basic arithmetic calculations using the Java programming language.