READ ME FILE:

CALCULATOR:

This Java class provides various mathematical operations such as addition, subtraction, multiplication, division, square root, power, mean, and variance calculation.

Methods:

add(double num1, double num2)- Adds two numbers and returns the result.

subtract(double num1, double num2)- Subtracts the second number from the first and returns the result.

multiply(double num1, double num2)- Multiplies two numbers and returns the result.

divide(double num1, double num2)- Divides the first number by the second number and returns the result.Throws an `IllegalArgumentException` if the second number is zero.

squareRoot(double num)- Calculates the square root of a number and returns the result.Throws an `IllegalArgumentException` if the input number is negative.

power(double base, double exponent)- Raises the base to the power of the exponent and returns the result.

mean()- Calculates the mean (average) of a set of numbers entered by the user. Prompts the user to enter numbers until they type 'end'. Throws an `IllegalArgumentException` if no numbers are entered.

variance()- Calculates the variance of a set of numbers entered by the user.Prompts the user to enter numbers until they type 'end'.Throws an `IllegalArgumentException` if no numbers are entered.