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Polynomial Calculator

Program Operation

The goal of this project is to create a calculator that can perform various functions on a given polynomial, granted the polynomial has a max exponent less than 21 and there is one coefficient per each different exponent. The coefficient will be the first number on the line and the exponent will be the second. The space between the two numbers is symbolic of the unknown (x) and each new line signifies a different pair of a number and its exponent

Example:

4	3	(4x ³)
5	16	(5x ¹⁶)
7	19	(7x ¹⁹)
2	7	(2x ⁷)

There are various operations that can be performed on these numbers that can be selected from a menu (example on how to provide input for each case is given when running the application), including:

- Evaluate
- Add
- Subtract
- Multiply
- Roots

Lastly, this project has two interfaces.

1. A text-application which receives input from the command line
2. A graphical user interface

(In order to use the text-app version, run the "TextApp.java" file which is located in the "application" folder and in order to use the GUI version, run the "SetupTesterGUI.java" file which is also located in the "application" folder.)