***Program***

***Documentation***

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**Flowchart Explaining How program work**

**START**

**Calculates the result**

**VALIDATES**

**If correct, it moves down**

**TAKES**

**INPUT**

**Prints the result**

**End**

**If**

**Invalid**

**Program Features**

**Command line Arguments:**

*The program can take in command line arguments, if the expression is valid, it shows the result, if its invalid, it rejects the input***!**

**Working operators:**

*The program works for \*, /, -, +, (,) operators***!**

**Input Validation:**

*The program Handles wrong input at every step of execution!*

**Correct Inputs:**

*The following are the samples of correct inputs!*

1. *5/5\*5+(5+2) – before bracket, you must give the operator!*
2. *5+-5 is valid as well*

*And every other combination like these you can imagine, it works for it!*

1. *For command line, you can enter in this format:*

*program.exe 5+5+5+5 or 5 + 5 + 5 + 5*

**Program model**

**Program consists of the following functions!**

*1-Input validation:*

*Validates the expression for correct input*

*2-MutlidigitsExpressionAdjust:*

*Fixes the expression in case it consists of multi digit number*

*3-Calculation:*

*Performs the Calculation after the expression is converted into post fix notation!*

**Note: the designs above are manually created by me ;)**