This file contains the instruction and guidelines of how to pass the test cases, and how to execute the code:

- The code incorporates for all **three formats** that is number, simple expression and polynomials.
- For the case, of simple expressions and polynomials **do not use multiplicative** operator ('*'). The code does not recognize the operator. For instance,

  Instead of writing 3*x, write it as 3x, OR

  Instead of writing 3*a*b*x, simply write it as 3abx

- For any term, the total coefficients or the overall coefficients should be mentioned at the **start of the term**. For instance,

  32xy2z would not work in this program, which could be re-written as: 64xyz

- In the case of polynomials, whenever raising a term to any power, use ('^') operator, which should be followed by the number you want to raise the power of the variable by. For instance,

  $$2x^2y^3$$

  Should be written as 2x^2y^3.

- In case, any input contains two sign operators it would give an error. So, it would be a suggestion to avoid giving inputs in such a manner.
- In the above code, the user does not need to take care of the order of the variables in a term. The order is taken care of in the program. For instance,

  x^2yz^3 can also be written as yx^2z^3. One area where the user needs to exercise caution is putting the correct power of variables.

- So, the user should give input in the form:

  Number: Like normal input, Example : 2,3,57,12,3210

  Simple Expression: 2x-5, 72y+5, 5-32x

  Polynomial : 3x^2y + 3 – 5y^2, x^2-2xy+y^2

- The three programs written in Python, Julia and Swift, take matrices as inputs by reading the matrix.txt file.

- Now, when inputting the test cases, in the matrix.txt file. It is to be noted that the first case should start from the **first line** of the text file. If it is not done, it will give an error.

- **No** input in the matrix.txt file should be **enclosed within quotes** (applicable for both polynomials and simple expressions as well). It should be entered with the above given format.

- In the text file, every line is read as a row of a matrix. Two different matrixes for test cases can be differentiated only using a **single break line.** Suppose I want to test for a matrix which has three rows. Then, in that case my matrix should be of three **consecutive** lines, each line representing one row. No **line break** should be present between the rows of the same matrix.

- For multiple expressions/term in a row, each expression/term should be separated by a **single whitespace only.**

- Every test case should **only** be separated a **single break line.** If more than one line is given it will lead to an error.

- After the end of any line, **no whitespace** should be present.

- No **line break** should be left after the last row of the last test case. This means, that the last line of the text file should be the last row of the last test case.