**Logarithm Function Notes**

The logFunction module is designed for evaluating logarithm of given base number and argument number. LogFunction class have 3 attributes: base, argument, result. Base represent the base number. Argument represent argument number and result is the final calculated result. \_\_init\_\_ is the constructor of this class which used to initialize those three attributes. The set functions of base number and argument will set the number by given input respectively and convert the number to float if input entered is fraction. The set\_values method is used to take user input as base number and argument as well as validate the number entered. Three exceptions are used to in this method to handle the exceptions:

1. if base number is equal to 1.
2. If base number is less than 1.
3. If the argument entered is less than 0.

For all three cases, there will be an error message for each of them and ask the user to re-enter the number. The ln\_helper method is responsible to calculate the natural logarithm of given number and the cal\_log method is for calculate the final answer by taking the division of the result of two natural logarithm. The detail of the algorithm implemented in pseudocode. The get\_result method is used to get the final result of this function.