Simple Scientific Calculator

1. Student Profile

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1. Program Description

This program is made as a replacement of scientific calculator in a simple way. This program can do several things that scientific calculator does such as:

1. Adding
2. Substracting
3. Dividing
4. Multiplying
5. Sin(x)
6. Cos(x)
7. Tan(x)
8. Power
9. Square root
10. Logarithm
11. Desingn / Plan

Design / Plan will be shown in the last page.

1. Function Explanation

There are several functions that work in the project will be explained.

1. Void setFunction (string, string)

This function is to set values that are entered by user to be worked in the main function. This function sets basic calculation values such as sum, substraction, division, and multiplication.

1. Void setDegreeFunction (float, float)

This function is to set values that are entered by user to be worked in the main function. This function sets trigonometry calculation values such as sin(x), cos(x), and tan(x).

1. Void setPowerFunction (int, int, float)

This function is to set values that are enterd by user to be worked in main function. This function sets power calculation values.

1. Void setSqrtFunction (int, float)

This function is to set values that are enterd by user to be worked in main function. This function sets square root calculation values.

1. Void setLogFunction (float, float)

This function is to set values that are enterd by user to be worked in main function. This function sets logarithm calculation values.

1. Double getSumFunction ( )

This function is made to return a total of sum function that called in the main function.

1. Double getMinFunction ( )

This function is made to return a total of substraction function that called in the main function.

1. Double getDivisionFunction ( )

This function is made to return a total of division function that called in the main function.

1. Double getMultiplyFunction ( )

This function is made to return a total of multiplication function that called in the main function.

1. Double getSinFunction ( )

This function is made to return a result of sin (x) that user input in the main function.

1. Double getCosFunction ( )

This function is made to return a result of cos(x) that user input in the main function.

1. Double getTanFunction ( )

This function is made to return a result of tan(x) that user input in the main function.

1. Double getPowerFunction ( )

This function is made to return a result of a power function that called in the main function.

1. Double getSqrtFunction ( )

This function is made to return a result of the square root function that called in the main function.

1. Double getLogFunction ( )

This function is made to return a result of logarithm function that called in the main function.

1. main ( )

This function is to run the whole function above, in this main function, there are menu to displayed by *cout*, user input by using *cin*, call the other function to make this calculator works. This main function is also using the *ofstream* to output the history of results in “History.txt” file in the same folder as the project.

1. What I learned?

From this project, I have learned how to apply all of the subjects that I have learned in the class before. This project made me understand more about the subjects that I have learned before.

1. Promblem(s) that I Have Overcome

Through this project, I have overcome problem that I cannot solve before such as applying the subject that I learned like functions, class, outputfile, in codes.

1. Coding