Gnuplot Data Visualization

This C program generates data for the functions and visualizes them using Gnuplot. The development environment used is CodeBlocks.

Prerequisites

Make sure you have Gnuplot installed on your system.

Maybe you need to do the following steps:

Win + X

System

Erweiterte Systemeinstellungen

Umgebungsvariablen/Systemumgebungsvariablen

Systemvariablen (runter scrollen und bei PATH doppelclicken)

Neu erstellen

Und den Pfad wo gnuplot installiert ist einfügen

(z.B. C:\Program Files\gnuplot\bin)

Compilation

Open the project in CodeBlocks.

Click on "Build and Run" (F9) or use the Build button to compile the program.

Execution

After compilation, run the program.

Check the console output for any error messages.

Description

The program creates data files (data_X.tmp) containing values for the functions.

It opens a Gnuplot pipe to visualize the data.

Gnuplot commands are sent through the pipe to set the title and plot the data.

After plotting, the Gnuplot pipe is closed.

Notes

If there are issues with opening files or the Gnuplot pipe, the program will display an error message.

Adjust the Gnuplot commands in the gnuCommands array to customize the plot appearance.

Ensure that you include the math library during compilation for the functions.