Abstract

The objective of this work is to create a tool for solving nonlinear equations using numeric methods. It uses both slow working methods, such as bisection method or regula falsi method, and fast working methods, such as Newton's method. The Newton's method, while fast, can be very problematic in certain scenarios. It does not always converse to the root of the equation. That is why in this work, I try to implement modified methods, which attempt to deal with the imperfections of the Newton's method. The program is suppose to be a good tool for comparing and evaluating the efficiency of each methods in different situations.