C++ Assignment 2

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February 2016

Task 1

An auto differentiator was implemented using polymorphism. Functions are passed to this program using the syntax described by running *./auto_diff -h*. On average calling the auto_diff functions which rely recursive calls to the virtual tables take ≈ 10 times longer to call than the hardcoded functions. The impact of the virtual functions depends on the complexity of the function expression passed. The more recursive calls the larger the impact.