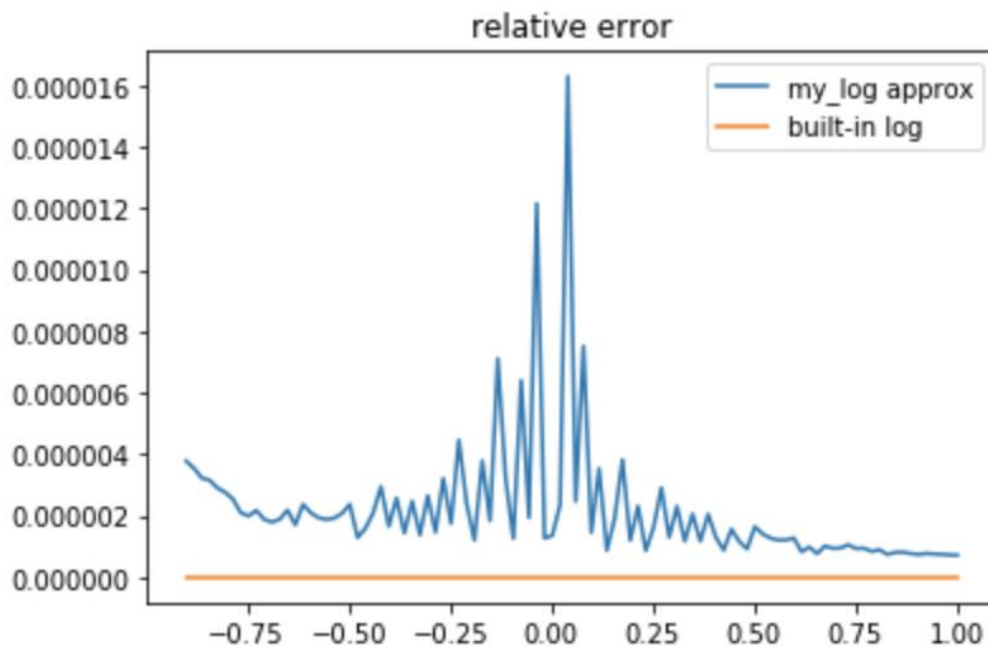# Part 1a report
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The domain of my_log1p(x) is (-1,1], so my_log1p(x) can only be used to calculate when x is in this domain. If x is greater than 1, my_log1p(x) will diverge.

In terms of relative error, when x gets closer to -1, the relative error will become very large. In this case, we can observe the relative error when x is in [-0.9,1].

From the graph above, we can see that the relative error will increase when x is approaching 0, which will lead to the most inaccurate result.

Now let us consider when x is less than machine epsilon, we can see the relative error of my_log1p(x) stays at 1.

relative error