Issue #14743:

logit scale ignores limits when no data is plotted(original)

logitlocator misses tick at edge of axis(follow-up)

Description:

Original issue:

The original issue is that logit scale ignores limits when no data is plotted, however we found that this is issue can be generalized for other situations where data is plotted, and limit of y is defined. According to the issue post, the issue has already been fixed by Pull Request #14928; however, our testing shows that the issue is still present.

Follow-up issue:

Based on the issue post, there is a follow-up issue where no tick exists at the upper bound of the limit of y.

Related issue:

Another related issue is that there are too many ticks on the y axis causing the graph to be cluttered and unreadable. This issue was supposed to be fixed by Pull Request #14512, but our testing shows otherwise.

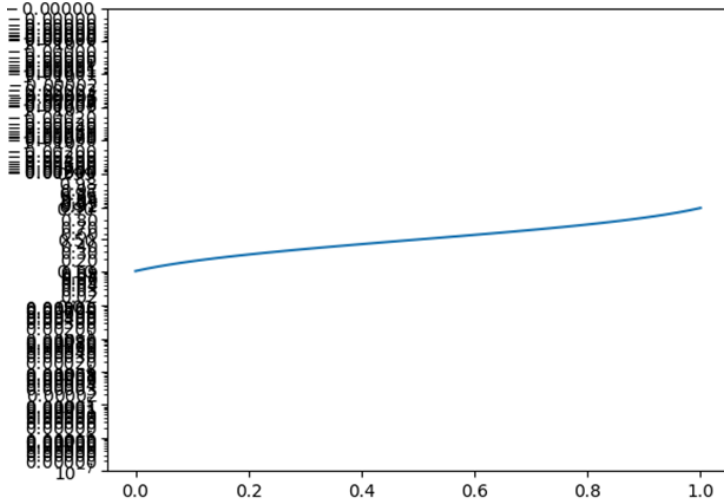## Reproduction Steps:

1. Install required packages
   a. *python -m pip install -U pip*
   b. *python -m pip install -U numpy*
   c. *pip install -e*
      git+git://github.com/RiazCharania/matplotlib.git @master#egg=riaz-matplotlib
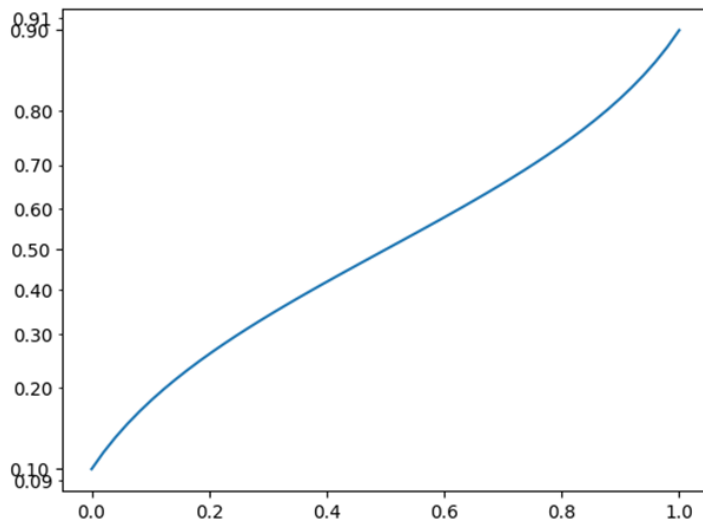2. Download file 'Issue_14743.py' and run it using *python Issue_14743.py*

Results:

Buggy:

As shown above, there are too many ticks, and the specified limit for y is ignored.

Expected:

There is reduced number of ticks and the set limit of y is respected.