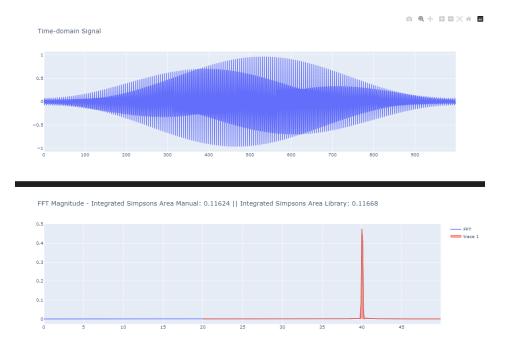
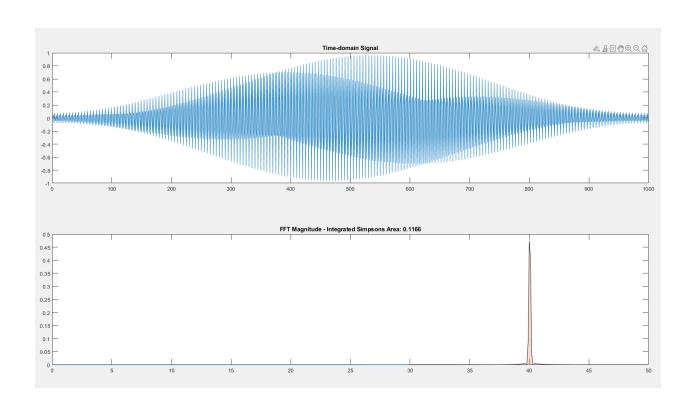
1a - python



1a - matlab



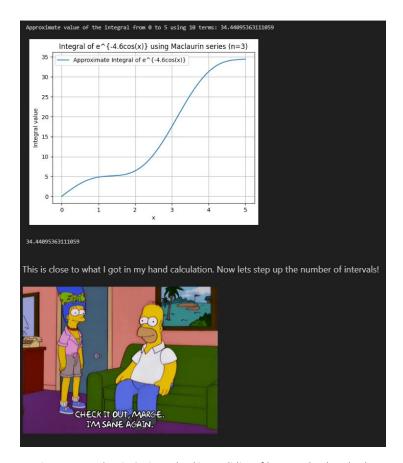


Figure 1: Maclaurin Series - checking validity of low N value hand calc

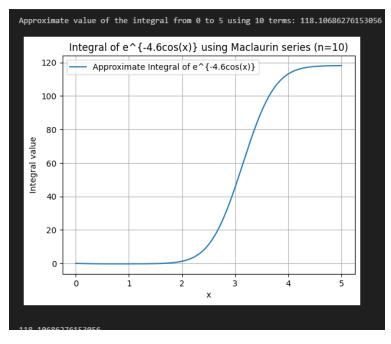
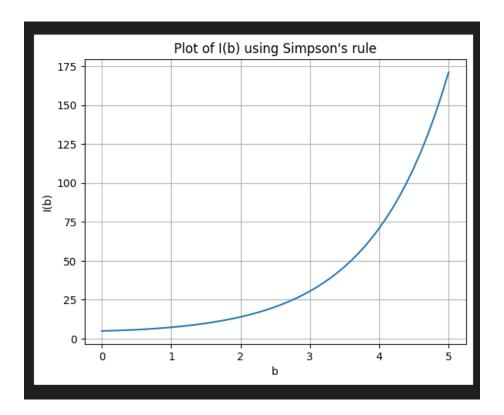
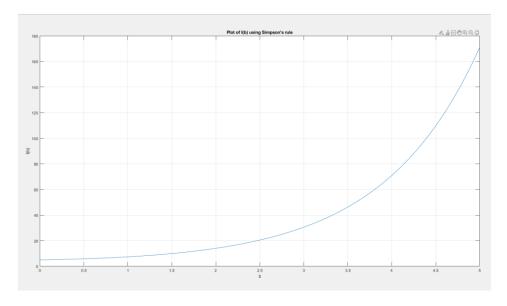


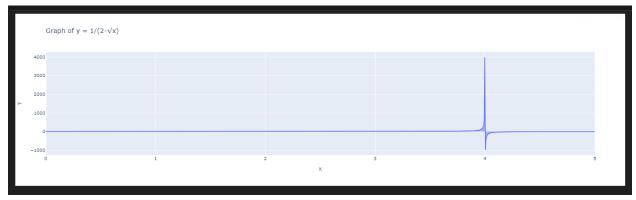
Figure 2: increasing N to compare to Simpson Rule

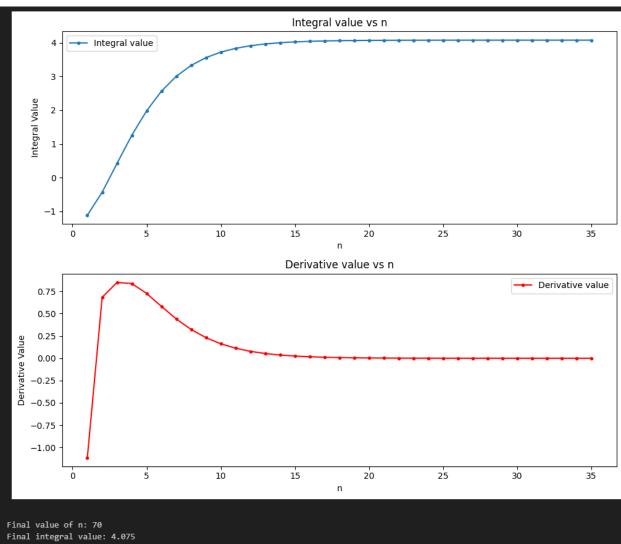


1b – matlab



1c – python



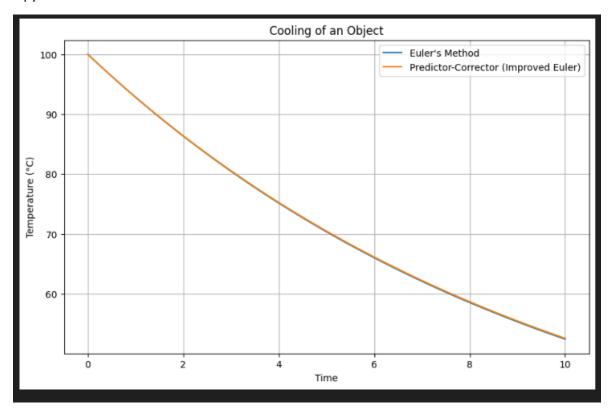


1c – matlab

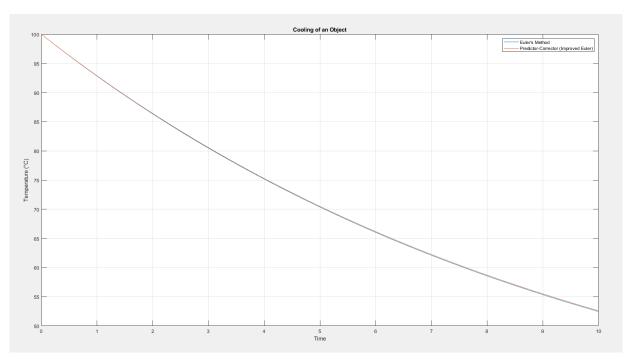
**** https://www.mathworks.com/help/matlab/ref/integral.html - matlab uses the same approach!!

Output - Value of I from 0 to 5: 4.07500

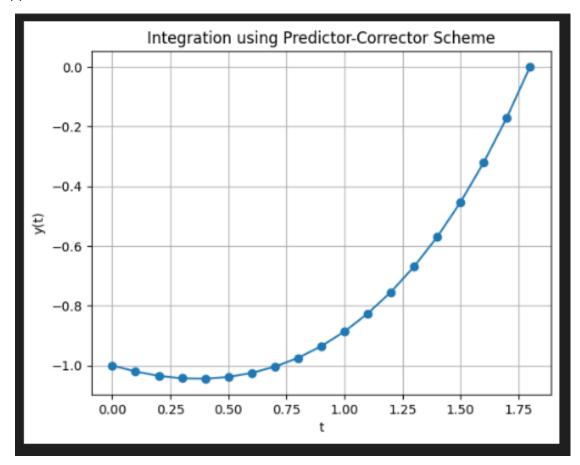
2a – python



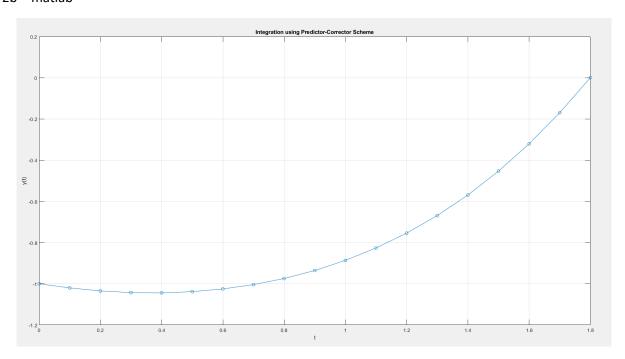
2a – matlab



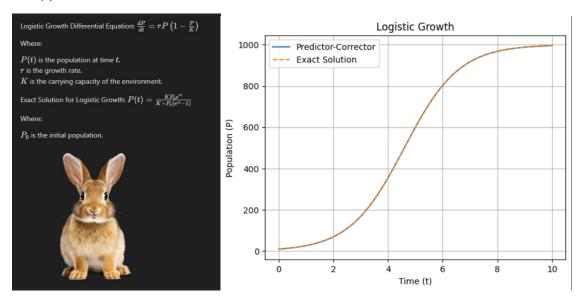
2b – python



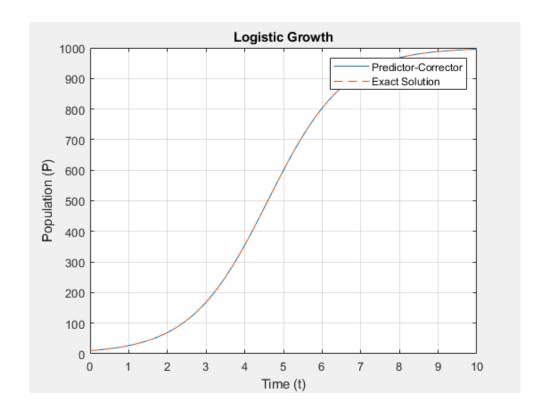
2b – matlab



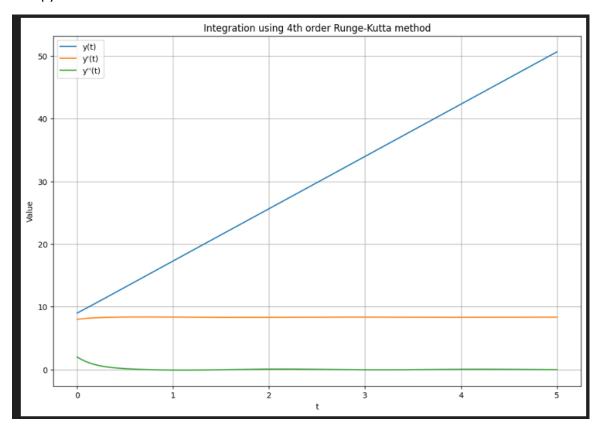
3a – python



3a - matlab



3b – python



3b – python

