

## DAA Experiment 1

This experiment helped me solidify my concepts of functions, which stem from the knowledge of knowing a relation. To execute this experiment, I first read through the C online library and understood the various command words to be used for the mathematical functions like  $\log$ ,  $\ln$ , exponent and power.

Then, I made a C program that utilized a simple for loop to iterate 101 times (from 0 to 1000) <sup>for all functions</sup>, except for  $n!$  which I iterated 21 times (from 0 to 20) and printed the outputs of all the functions in a tabular manner.

This was the easy part for me, but taking the output of the program into a text file was a whole new concept for me, which utilized using the command `./Program1.exe > Output.txt`. I then proceeded to copy the text contents of the .txt file onto an MS Excel file (I do not have LibreOffice installed, therefore I used Excel).

Then, I generated 2 line graphs with markers - the first one containing the outputs of all the functions taking 5 inputs for each and the second one containing all but one function,  $n!$  which took 10 inputs.

In this manner, I completed the experiment and solidified my concepts on functions.