

Project #1: Calculating Sums and Factorials

Date Assigned: September 16, 2025

Date Due: September 29, 2025

Assignment:

Write a Python program that does the following, in the order specified:

1. Imports the Python math library.
2. Prints out a message to welcome the user to the program, and tells the user what the program will do.
3. Ask the user to enter a positive integer.
NOTE: you need not do error checking in project 1. You can assume that the user will actually enter a positive integer.
4. Calculate the sum of all integers between 1 and the user's number, inclusive. Print out the original number and the sum, clearly labeled as to what each number means.
5. Calculate the square root of the sum you obtained in step 4, using the math library. Print this out, clearly labeled as to what it is.
6. Calculate the factorial of the number. That is, the product of all the integers between 1 and the user's number, inclusive. Print out the original number and the factorial, clearly labeled as to what each number means.
7. Calculate the cube root of the factorial you obtained in step 6, clearly labeled as to what it is.
8. Print out a message to the user thanking the user for using your program, and then terminate.