

## Assignment #2

These assignments show how computers are not able to think and reason like a human being can. When I see  $1 + (1 * 10^{-99})$ , I can use intuition to find it out and my math comprehension. However, a computer only knows two inputs: on and off. Unless the code built is complex enough to handle real numbers that small, the computer will not be able to add and will encounter some sort of mistake. This program shows how stubborn computers are, and that when writing code, we must be able to prepare for every possible error.

My guess for the extra credit assignment was that the partial sum ceases to increase because of a lack of precision. Because the computer cannot calculate numbers that small using real\*4 numbers, the computer will no longer be able to continue the series and the series will converge, even though it does not in real life.