Q4:

4. (50 points extra credit for everybody) Let’s revisit computing the value of pi, but this time we will use a series. For instance, we provide you with code for the Leibniz’s series, developed by Jose Cintra. Implement this series on the GPU, allowing the user to enter the number of iterations. Make sure to develop an efficient computation of this kernel that utilizes the parallelism provided on the GPU. Then modify this code to use single precision math. Show results for at least 10 different number of iterations of the series and discuss how precision plays a role in the rate of convergence.