MAD 6406: HOMEWORK 9

Due: Friday, November 6

Numbered problems are from Trefethen and Bau, Numerical Linear Algebra. Starred problems (*) require the use of Matlab (you can use another language if you prefer).

(1) 19.1

(2) 19.2

(3) In double precision, what is the distance from 32 to the next largest floating-point number? What is the distance from 2^{53} to the next largest floating-point number?

Email address: s.pollock@ufl.edu

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF FLORIDA