NUM I 22-23: Assignment 6

Write a Fortran program which does the following task:

1) Find the root of the function

$$f(x) = (2 \exp(x) - 2 x^{**}2 - 3)$$

in the interval [-2,2] with a precision of 10E-7 by using the bisection method and the false position method.

2) Write on two output files the values of the iteration step and that of the estimated root for the two method.

REQUIRED: implement the two methods as subroutines

HINT: To get the sign of a real x, use the Fortran intrinsic SIGN(1.0,x)

BONUS QUESTION: What is the fastest method and why?

HELP: https://www.desmos.com/calculator

Send the source code to <ggiulian@ictp.it> by October 3rd

Only the file that contains the source code is required possibly named as: Ass06.YourLastName.f90