



Department of Mathematics and Natural Sciences

MAT 350

ASSIGNMENT 2

FALL 2023

You have to submit the assignment in a *zip* file containing the *f90* and the input/output files using [this form](#). Submission Deadline: Before Mid

1. Solve the following IVP in $[0, 2]$ using Euler Method with $h = 0.1$ and compare with the actual solution. [Your final output should contain 4 columns: $t(i)$, $x(i)$, *actual solution*(i) and *error*(i)]

$$\frac{d^2x}{dt^2} + 25x = 0, \quad x(0) = 1, \quad x'(0) = 0.$$