PGE 392K In Class Assignment

Oct 29, 2020

Create a function file/subroutine to compute the , , , and C\* arrays for a homogenous 1D problem using the upwinded scheme and mixed boundary condition (zero flux) at both ends. Assume the pressure field is known and provided as well as the Courant number and dimensionless diffusivity constant. Well block numbers and their rates (injector or producer) are also given.

Test your code using N=5 grids, and the following two conditions the following two conditions:

1. Injector Well ( =0.5) with Cinj=1.0 in N=1 block and producer well  =0.5) in N=5
2. Injector Well ( =0.5) with Cinj=1.0 in N=3 block