In-class assignment # 9

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Instructions: In today's class we are going to discuss and implement the 2^{nd} order finite-volume advection in one dimension (as discussed in Section 4.4 of Zingale's lecture notes). First implement it without a slope limiter (the minmod limiter discussed in Section 4.4.1) and then, if you have time, create a separate implementation with a limiter. Show how the behavior for the square wave evolves compared to the 1st order upwind method that you implemented before class. (Note: this will be part of our pre-class assignment for next class!)

As per usual, submit your code, plots, etc. via GitHub!