Consider the initial-value problem for Burgers’ equation:

\[
\begin{align*}
  &u_t + \left( \frac{u^2}{2} \right)_x = 0 \quad \text{for } (x, t) \in \mathbb{R} \times (0, \infty) \\
  &u(x, 0) = \sin(2\pi x)
\end{align*}
\]  

(1)

Use second order ENO-LLF to compute the solution at time \( t = 0.25 \). Plot your solutions on the domain \( x \in [0, 1] \). Submit this plot, a short (one to two page) description of your implementation, and your sourcecode.