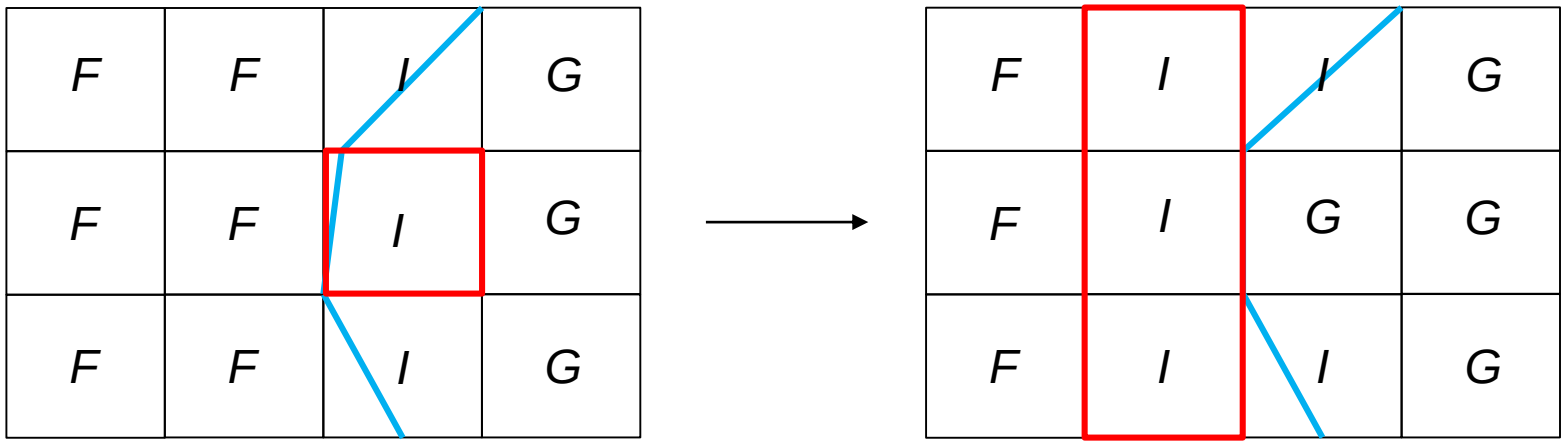
Track Free Surface

- Assign state to each cell: Fluid, Gas, Interface
- Track mass of fluid, add a transport equation:
  $M(\boldsymbol{x}, t + \Delta t) = M(\boldsymbol{x}, t) + \Delta M(\boldsymbol{x}, t)$, $\epsilon = \frac{M}{\rho}$
- Cells change state: $M(\boldsymbol{x}, t) = 0, I \rightarrow G$, $M(\boldsymbol{x}, t) = \rho(\boldsymbol{x}, t), I \rightarrow F$, and continuity of interface



$\epsilon \approx 0$ $\epsilon \approx 1$