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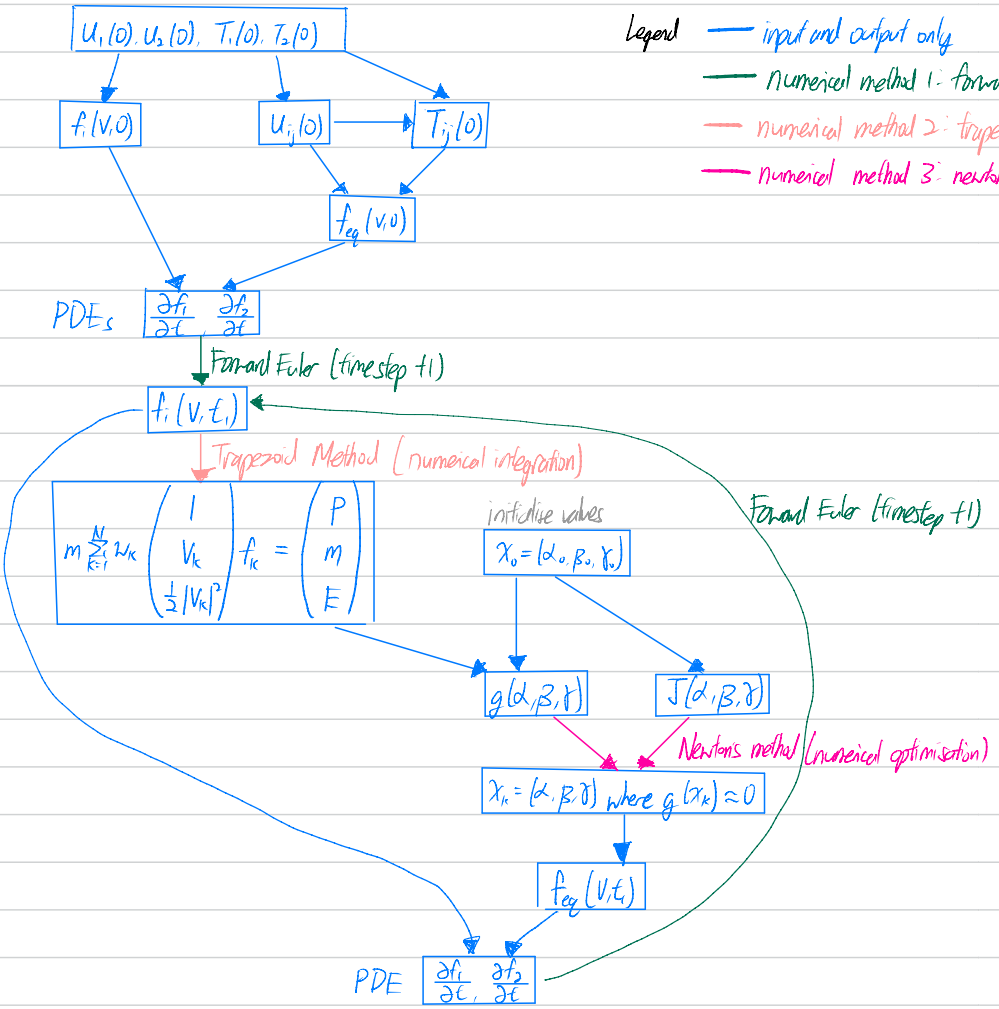
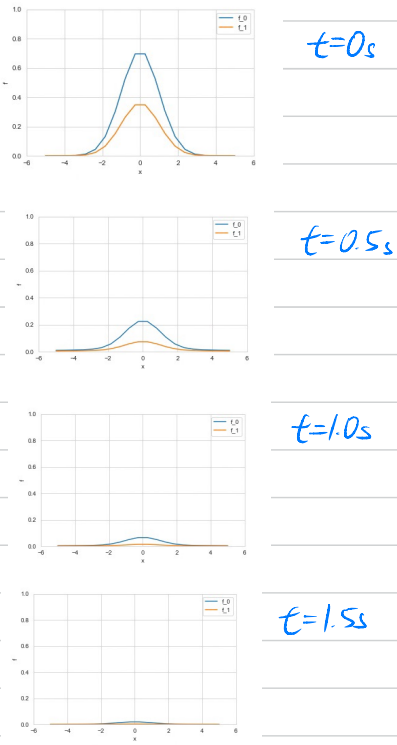
3. Code thinking process and schema: Input and output variables constructed with dependency graph to help with computation.



2D - numerical solution



Forward Euler: helps to solve first order PDEs.
Timestep chosen to be small (0.015s) as too large of a timestep may cause divergence in results

Trapezoid Method: helps to compute integration sums for (p,m,E), and is simplest to implement
Implementation wise, $\int_{\mathbb{R}^3}$ is approximated with boundaries $(-5,5)^3$ as any large boundaries have small f_i values, while any smaller boundaries will impact the results

Newtons Method: stated in lecture notes as a way to compute (α,β,γ) necessary for computing f_{eq} (an optimisation problem).
Error limit set at smaller than 0.1 as any smaller makes the computation more resource intensive, and any larger makes the result inaccurate