Send it in by reference
Dont call it by saying this thing = function, write function with arguments

- Put in constant pressure and density everywhere
  - Pressure constant = pressure gradient force = 0(points from low pressure to high pressure)
    - Pussing out, gravity pushing in
    - Gravity is pushing in only
    - Falling fast above sound speed
    - Shock speed = k changed, non constant
- Dont start with shocks
- Have a go altering problem file
- For given value of radius, compute a function of density
- Use density to calculate pressure
- Then use this as initial condition
- Net acceleration = 0
- Pressure balances gradient
- Should jiggle around a bit but no immediate infall
- Change the problem file!!!
- Keep using value of k from P and rho everywhere using original formula
- Figure out one value of r towards the bottom in the loop
- Go to problem generator directory (Athena, source, pgen)
- Get something like real r = pcoord —> x1v(i)
- Where is array?
- How is that array made available
- If it doesn't compile
  - Maybe include statement
- Look at blast wave setup
- Write up everything that was worked on
  - What I accomplished what I did over the semester
  - Getting used to how the code works

'thermtide.block0.out1.01000.vtk']

Real rb = 7.0e9
Real K = press0/pow(rho0,gamma)
Real Kcrit = gm*(gamma-1)/(gamma*pow(rho0,gamma-1))
rho = pow(rho0((Kcrit/K)*((rb/rad)+(K/Kcrit))),1/(gamma-1))