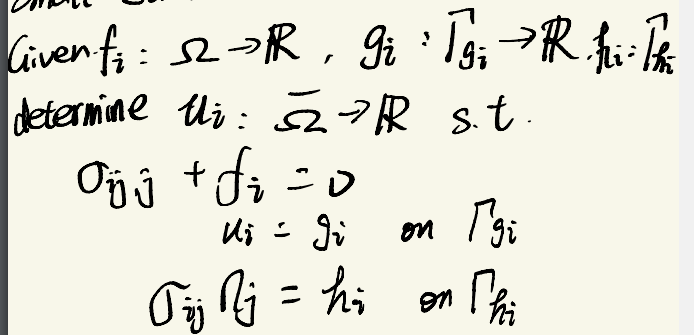
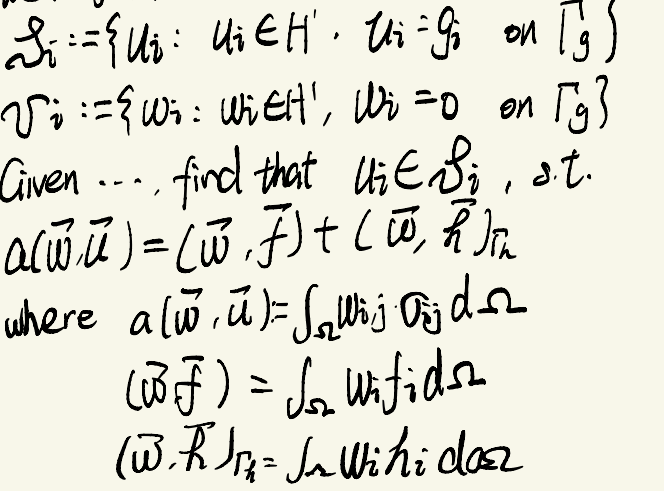
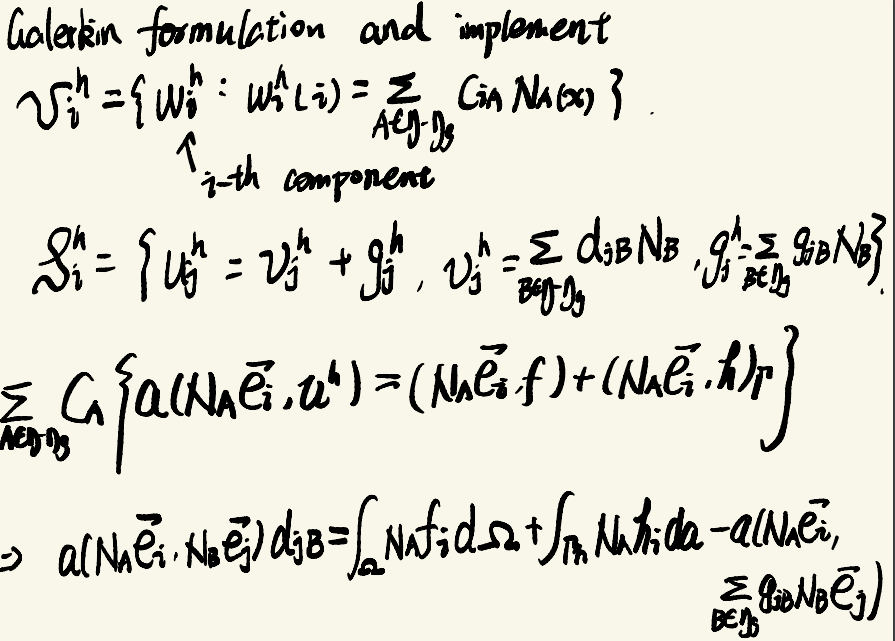
Computational Solid Mechanics Final Project Report

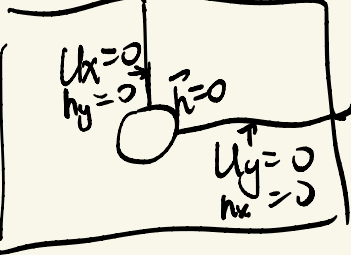
12110908 黄锦松

1. Problem Description

Strong form:

Weak formGalerkin formulation

Boundary condition

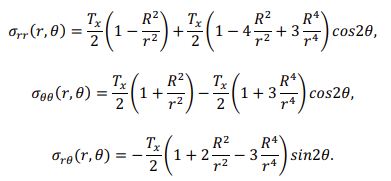
For the outer surface, there are Dirichlet BC (e.g. g = 0) and Neumann BC (e.g. h = T). For inner hole, the BC is h = 0. For symmetry surface, the BC is like this

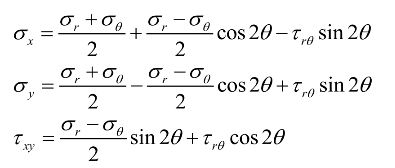
1. The implementation of the element stiffness matrix

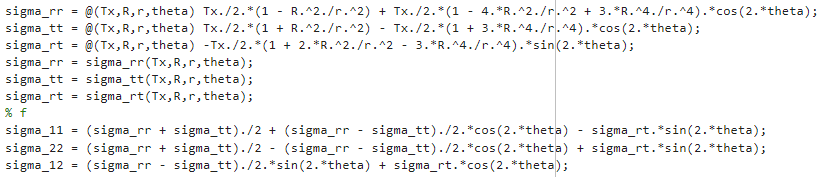
I choose implementation. Calculate B matrix first, then get by matrix calculation.

1. Manufactured solution

With given Tx = 10kpa, I calculate 3 stresses at each nodes as manufactured solution, then transfer the polar coordinates into Cartesian coordinates with equations below







1. The codes are in driver.m