

Assignment 01: Finite Element Analysis

Assigned: 28th January 2020

Due: 03rd February 2020 at 10AM

Perform short-term finite element analyses of the slope from Assignment 00 using the Optum G2 software.

- Plot the magnitude of displacement from the analyses
- Compare the effect of Element type, element size and mesh adaptivity
- For mesh adaptivity yes/no compare the results only for 15-noded Gauss element with 1000 elements.
- List as many unresolved questions you may have regarding the analyses.

Please use the following configuration for the FE analyses.

Description	Values
Analysis type	Elastoplastic
Element types	6-noded and 15-noded Gauss
Element sizes	100, 500, 1000, 2500
Mesh adaptivity	No
Load steps	10

