

Assignment 2

Create a SAP2000 model of the scale structure and determine the modal frequencies, and mode shapes. Assume all modal damping ratios to be 2%.

Perform a dynamic analysis to obtain the scale structure's response to the given Loma Prieta ground motion record. Plot the story accelerations and the following response quantities and determine their maximums.

1. Roof Displacement
2. Interstory Drift between floors 2 & 3
3. Base Shear
4. Overturning Moment

Compare all results to Assignment 1.