## **Test Case Scenarios**

## Test Case #1

- 1. Exit material selection menu.
- 2. Exit material selection menu again.
- 3. Select Graphene from menu.
- 4. Enter the length of the beam: -6
- 5. Renter the beam length: -6
- 6. Renter the beam length: -6
- 7. Enter the beam width: -2
- 8. Reenter beam width: 2
- 9. Enter the beam height: 0
- 10. Reenter beam height: 0
- 11. Reenter beam height: 0

Datasets used: MaterialElasticity\_1.csv

## Test Case #2

- 1. Choose Inconel Alloy from the material selection menu.
- 2. Enter the beam length: 10
- 3. Enter beam width: 0.2
- 4. Enter beam height: 0.2
- 5. Enter a concentrated force: 1600
- 6. Enter location of the force on the beam: 7
- 7. Enter vector of multiple concentrated forces: [700, 700, 700]
- 8. Enter vector of force locations: [2, 4, 5]
- 9. When prompted to repeat the multiple force calculation, select Yes.
- 10. Enter vector of multiple concentrated forces: [1500, 1200]
- 11. Enter vector of force locations: [5, 7]
- 12. When prompted to repeat, select No.

Datasets used: MaterialElasticity 2.csv

