Sample Code Summary for Sequentially Working Origami Multi-Physics Simulator (SWOMPS)

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Package Access:
The package can be found on GitHub: https://github.com/zzhuyii/OrigamiSimulator
Or from our group website at: https://drsl.engin.umich.edu/software/swomps-package/

Acknowledgement:
We would like to acknowledge the prior works from Ke Liu and Glaucio H. Paulino for establishing shared versions of nonrigid origami simulators. Their works paved the way for the new origami simulator, the origami contact, compliant crease, electro-thermal model presented in this package.

Reference:
Mechanical Loading Example:

1. Bistable4Vertex.m
   - Using compliant crease model
   - No inter-panel contact
   - Displacement controlled loading
   - Modified generalized displacement controlled loading

2. CornerFoldingSequence.m
   - Using Compliant crease model
   - With inter-panel contact
   - Sequence of self-folding method
3. **DoubleFold.m**
- Using Compliant crease model
- With inter-panel contact
- Self-folding method
- Newton-Raphson loading method

4. **FlowerSelfFold.m**
- Using Compliant crease model
- No inter-panel contact
- Sequence of self-folding method
5. **LockingLinkage.m**
   - Using Concentrated crease model
   - With inter-panel contact
   - Self-folding method
   - Newton-Raphson loading method

6. **MiuraBeam.m**
   - Using Compliant crease model
   - No inter-panel contact
   - Modified generalized displacement controlled method
Thermal Loading Example:

1. Example01_SingleFold.m
   - Using compliant crease model
   - With inter-panel contact
   - Self-fold loading
   - Newton-Raphson loading
   - Thermal loading

2. Example02_DoubleFold.m
   - Using compliant crease model
   - With inter-panel contact
   - Self-fold loading
   - Newton-Raphson loading
   - Thermal loading
3. **Example03_Miura.m**
   - Using compliant crease model
   - No inter-panel contact
   - Thermal loading

4. **Example04_LongStripe.m**
   - Using compliant crease model
   - No inter-panel contact
   - Thermal loading
5. **Example05_MiuraBeam.m**
   - Using compliant crease model
   - No inter-panel contact
   - Thermal loading

6. **Example06_Crane.m**
   - Using compliant crease model
   - No inter-panel contact
   - Thermal loading
7. **Example07_Flowerd.m**
   - Using compliant crease model
   - No inter-panel contact
   - Thermal loading