Assignment 3 BMS (Visualization).

Find appropriate PDB structures for each visualization

1. Depict alpha-helix; 3-10 helix, pi-helix, left handed helix, parallel beta sheet, antiparallel beta sheet, turn with glycine, and turn with proline (**8**)

2. Depict 5 different non-bonded interactions present in protein structures - do include pi-stacking and cation-pi interactions (**5**)

3. Depict alpha, beta, alpha/beta and alpha+beta protein structures (**4**)

4. Generate a random sequence of length 50, predict the structure and depict. Why is the structure so random? (**3**)

5. Take a random globular protein structure (sequence length < 100), identify which of the residues form the hydrophobic core, and depict (**5**)