Name:

1. Convert your name to an amino acid sequence of length 14.
   1. Use only the letters ACDEFGHIKLMNPQRSTVWY (i.e., do not use B, J, O, U, X or Z).
   2. If your name has the letters B, J, O, U, X or Z, convert them to H, Q, R, D, K, or E respectively [B->H, J->Q, O->R, U->D, X->K or Z->E]. Color these letters red.
   3. Use each letter once. If a letter occurs more than once, switch all but the first occurrence to different letter. Color these letters blue.
   4. If your name has fewer than 14 characters, use the city of your birth to add the additional characters. Color these letters green.
   5. Example
      1. Name: Aakanksha Ho
      2. City of birth: Seattle
      3. AAKANKSHAHOSEA => ACKFNMSHQHRSEU
      4. Your Name is:
      5. Your city of birth is:
      6. Your peptide Sequence is:
2. Draw the chemical structure of the oligopeptide corresponding to the first 7 amino acids of your peptide
   1. In the N to C direction
   2. With explicit chemical structures of sidechains
   3. With correct stereochemistry at all Ca
   4. In the dominant protonation state at pH 7.0
   5. With each peptide linkage in the dominant resonance form
   6. With boxes around 3 consecutive sets of coplanar atoms.
3. Draw the chemical structure of the oligopeptide corresponding to the last 7 amino acids of your assigned protein
   1. In the C to N direction
   2. with correct stereochemistry at each Ca
   3. In the dominant protonation state at pH 5.0
   4. With each peptide linkage in the resonance form with an oxyanion and a cationic nitrogen.

*Further explanation*: You have 14 amino acids in your peptide. Say the sequence is:

ABCDEFGHIJKLMN (that is 14 letters, your sequence will be different).

For N to C use

N-terminus ABCDEFG C-terminus

for C to N use

C-terminus NMLKJIH N-terminus