## Homework #3

Modifying someone else's program is both easier and harder than writing your own. There is often a feeling that it will take more time to understand someone else's program than to write your own. In this case, since we went through it together in class, hopefully it will be straightforward.

- Start with the simple DNA -> Protein translation program (you can download it from the class site) we wrote in class today. Let's assume that we've dealt with identifying a promotor, etc, and that the sequence we're getting is within a few residues of being the start of a coding region of DNA. However, the exact frame hasn't been identified, and clearly if we start with a frame shift we'll get the wrong sequence. Modify the program to identify the correct frame by assuming the first ATG we find represents the beginning of the coding region, then translate only until a stop codon is found.
- example: if your program were given 'gatggcagct aaagacgtaa aatgaaaa' it should produce 'maakdvk'

To hand in your homework: Create a ".py" file containing the final program. Attach the text file to the email you send me. Please send the solution in an email message with the subject "Homework 3". <u>sludtke@bcm.edu</u>