

Project-12

Write a program to read DNA sequences file (prj9.fasta) and store the information a format for calculation for sequence features. Calculate following:

- Compute Shannon entropy for each DNA sequence.
- Compute dinucleotide relative frequency from DNA sequences and expected dinucleotide relative frequency assuming $P(x) = 0.25$, where $x=\{A,T,G,C\}$. Note: the number of dinucleotide is $length(DNA)-1$
- Plot ratio of observed/expected relative frequency for all possible dinucleotide.