**DNA analysis toolkit**

A tool kit consists of some functions that help in analyzing the nucleotides’ sequence and get data out of it.

The tool kit consists of:

* A validation function that validates if the provided sequence consists only of the 4 DNA nucleotides or not
* A counter the loops through the sequence and counts the 4 bases
* Transcription functions that transcript the DNA into RNA
* A function that generates the complementary DNA string and it’s reverse
* GC content calculator
* GC content calculator but for certain length
* DNA to Amino acids function that takes each 3 bases to get the codon’s acid
* Codon usage calculator
* Reading frames generator
* Protein’s extractor