Central dogma project test cases

- Test cases that must be handled:
    1- Start with the start codon and end with a stop codon
    2- Start codon could be anywhere not in start
    3- More than start codon
    4- More than stop codon
    5- No start codon
    6- No stop codon
    7- No start and stop codons
- Handle as much as you can other cases concerning data entered and errors.
- Messages explaining the results are important (ex. If there is no stop codon you must print the result amino acids but say that there is no stop codon. If there is no start codon then no amino acids should be printed and state the reason).
- The test case could be any mix of those test cases (ex. combining testcase 2 and 3 together, …, etc.)

Sample test cases

1-

Input:

DNA: 3'- TACCGGTACCGCGGGTCTTGACTCTAGTTATCATGGGCATAATTGCCCACT-5'

Output:

Complementary:

5'- ATGGCCATGGCGCCCAGAACTGAGATCAATAGTACCCGTATTAACGGGTGA -3'

RNA:

5'- AUGGCCAUGGCGCCCAGAACUGAGAUCAAUAGUACCCGUAUUAACGGGUGA -3'

Triplets:

AUG GCC AUG GCG CCC AGA ACU GAG AUC AAU AGU ACC CGU AUU AAC GGG UGA

Protein:

MAMAPRTEINSTRING*

2-

Input:

DNA:

3'-
GAGTACGGGTACCCTAATCACACCGTGTTTGTTCCTGGTGATCTTTCCTATAGATATTCTCCTCAT
TATCCTCAATCCTCGCCCATATT -5'

Output:

Complementary:

5'-
CTCATGCCCATGGGATTAGTGTGGCACAAACAAGGACCACTAGAAAGGATATCTATAAGAGGA
GTAATAGGAGTTAGGAGCGGGTATAA -3'

RNA:
5'-
CTCAUGCCCAUGGGAUUAGUGUGGCACAAACAAGGACCACUAGAAAGGAUAUCUAUAAGA
GGAGUAAUAGGAGUUAGGAGCGGGUAUAA -3'

Triplets:
CTC AUG CCC AUG GGA UUA GUG UGG CAC AAA CAA GGA CCA CUA GAA AGG AUA UCU
AUA AGA GGA GUA AUA GGA GUU AGG AGC GGG UAU AA

Protein:
MPMGLVWHKQGPLERISIRGVIGVRSGY
The result is not a protein as there is no stop codon