Writing a GeneFinder program

A. Write a program (your choice for the programming language) that will:
   • Read a DNA sequence, given from 5’ to 3’,
   • Generate the sequence of the complementary strand,
   • Find the longest possible “gene” (or open reading frame) for that DNA;
     Remember, there are 6 possibilities.
   • Transcribe this “gene” into mRNA,
   • Translate this mRNA into an amino acid sequence, using the one letter code for
     amino acid name

B. Test this program on the sequence:

5’ TCAATGTAACGCGCTACCCGGAGCTCTGGGCCC
AAATTTCATCCACT 3’

You should provide:
   - A report that shows the output of your program at least for the test case B. This
     report should include an introduction of the problem, a presentation of the method
     and the results, as well as a discussion on possible improvements.
   - The source code of the program itself