Project description:

Morse code is a binary decoding of letters, numbers, punctuation and a minor set of procedural signals (called Morse code prosigns) which was in major use at the onset of telecommunication. Each character is decoded by a sequence of short and/or long signals. In written form it is expressed in a combination of \." and \ ". A longer pause (space) separates two words.

Roman numerals are a much older form of writing numbers in a sequence of letters (I, V, X, L, C, D, M). It is another form of encoding information in a compressed form. Single letters do have discrete values. Combination of several letters can be used to express all positive integer numbers up to a certain limit.

Write a program for encoding and decoding of Morse code as well as Roman numerals. The program needs to en/decode entire texts and not only single words or letters. It has to accept a string/text file of arbitrary length as input, detect whether it contains Morse code, Roman numbers, or simply plain text and performs the reasonable conversion. However, it has to distinguish between Morse code and Roman numerals de/encoding. Plain numbers can be encode in both forms.