ABSTRACT:

The main target of this paper is to propose an algorithm to implement data hiding in DNA sequences to increase the complexity by using software point of view. By utilizing some interesting features of DNA sequences, the implementation of a data hiding is applied. The algorithm which has been proposed here is based on binary coding and the complementary pair rules. Therefore, DNA reference sequence is chosen and also a secret message $M$ is hidden into it. After applying three steps, $M'$ is come out. Finally, $M'$ is sent to the receiver. When the receiver takes the $M'$, the process of identifying and extracting the original message $M$, which has been hidden in DNA reference sequence, begins. In addition, security issues are demonstrated to inspect the complexity of the algorithm.