Graduation Project Questions

Mohamed Emary

Mohamed Abdelfattah Dalia Abdallah Abdelfattah Zakaria Sara Reda Shrouk Elsayed

October 16, 2023

Our Questions

- 1. Why the use of a polynomial equation as a password instead of a just a regular password?
- 2. In the decryption process how to know which root of the polynomial -in polynomials with degree higher than one- is the right root so we can use to decrypt our data?
- 3. When using numerical methods algorithms to get the roots of the polynomial, if we are using an algorithm like Bisection method, how to know the interval in which the root is located, or the starting point for algorithm like Newton-Raphson method?
- 4. We have found a lot of materials related to encryption algorithms in general but we couldn't find many materials related to polynomial based encryption algorithms, so can you provide us with some materials?
- 5. As of our research we have found information about the encryption and decryption of text data, but we couldn't find any information about the encryption and decryption of binary data like images and videos for example, so can you provide us with some materials?
- 6. The graduation project discussion in this semester will be mostly about UML diagrams, we know how to make UML diagrams but we don't have any idea of how to make UML diagrams for this project. For example the project doesn't have a database, so how to make a class diagram for a project without a database?