Assignment No: 1

Assignment Title: Classical cryptographic technique

Aim: Write a program using JAVA or Python or C++ to implement any classical cryptographic technique.

Objectives: To conceal the context of some message from all accept the sender and recipient (Privacy or secrecy)

Theory:

Explain the cryptography
Substitution cipher
Transposition cipher

Programming Language used: C++/Java/Python

Conclusion:

FAQs:

1. What are various classical ciphers?
2. Compare steganography and Cryptography
3. What are the few major applications of cryptography in the modern world?
4. How can Caesar cipher be cracked?

Assignment No: 2

Assignment Title: Feistal Cipher structure

Aim: Write a program using JAVA or Python or C++ to implement Feistal Cipher structure

Objectives: To understand the concepts of symmetric key cryptographic system.

Theory:

Explain Symmetric key cryptography.

Explain feistal cipher

Programming Language used: C++/Java/Python

Conclusion:

FAQs:

1. Differentiate between stream and block ciphers.
2. Write advantages and disadvantages of DES algorithm.
3. Explain block cipher modes of operations.

Assignment No: 3

Assignment Title: S-AES algorithm

Aim: Write a program using JAVA or Python or C++ to implement S-AES symmetric key algorithm.

Objectives: To understand the concepts of block cipher and symmetric key cryptographic system.

Theory:

- Explain Simplified Advanced Encryption Standard (S-AES) algorithm.

Programming Language used: C++/Java/Python

Conclusion:

FAQs:

1. Differentiate between DES and AES.
2. What are the different advantages and Limitations of AES?