Overview of the Week-2 Lecture ⚘

Overview of this lecture

This lecture is divided into two main sections: Part 1: Symmetric Key Cryptography and Part 2: Cryptographic hash Functions.

The part I describes the concepts of symmetric key cryptography such as one time pad, stream cipher and block cipher. We will thoroughly discuss different encryption techniques, their limitations and advantages.

In part II, we will learn practical examples of shared secret key (i.e. symmetric) with openssl

In part III, we will learn one of the most important topics in security which is Hash. More specifically, we will cover different types of Hashing and properties of hash functions. We will also real world interesting applications of Hashing: Online Bid and Email spam reduction. We will see how we can use hashing in online bid service to submit our bid securely, what are the possible flaws in such secure system and how to mitigate such issues etc.