DS **Difference between private key cryptosystem and public key cryptosystem**

Private key cryptosystem and public key cryptosystem are two main types of cryptography used for secure communication.

In a private key (symmetric) cryptosystem, the same key is used for both encryption and decryption. The key must be kept secret between the communicating parties.

In a public key (asymmetric) cryptosystem, two keys are used: a public key, which is used for encryption, and a private key, which is used for decryption. The public key can be freely shared, while the private key must be kept secret.

In summary, the main difference between the two is the use of one key versus two keys, and the fact that the keys used in public key cryptography have different functions.