Cryptography is a mathematical algorithm that maps data of a message to a bit array of a fixed size. The difference between this and normal encryption is that this is a one-way function, meaning it is impossible to invert.

Symmetric encryption is when a text is encrypted with a secret key and can only be decrypted using that same secret key.

Asymmetric encryption is when a text is encrypted using a public key, meaning that anyone can use the key to encrypt it, but only the person with the secret/private key can decrypt the text again.

SSH – Secure Shell