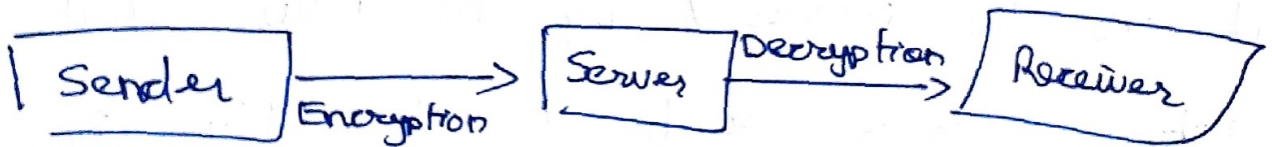


11/29 What do you know about end-to-end encryption? Explain its working with suitable example.

End-to-end encryption is the communication process that encrypts the data shared between two devices without any third party interference such as cloud services, internet service providers and cyber criminals.

Working of the technology



It uses encryption that is, an algorithm that transforms the text or images into a scrambled form. The receiver decrypts the message using a private key that unscrambles the message sent by the sender.

End to end encryption uses two keys public key and private key.

The public key is recognized by the certificate authority and presumed to be authentic.

messaging platforms such as Whatsapp, imessage and lately messenger has also joined the end to end encryption.

Concerns

As the technologies promotes impenetrability it can be misused by the non-state actors. Efforts such as the Five Eyes Alliance led by USA, and Information Technology intermediary guideline rules mandate traceability for surveillance.

with India witnessing 13.9 lakh cyber cases in 2022., end to end encryption is ideal, but it has to be supported by a National Encryption policy for wider representation.