

Blockchain Transaction

Blockchain Transactions:

**** Blockchains are a transaction-based system.****

Wallet helps to make a transactions:-

Wallet Address: A unique identifier for your wallet.

Private Key: A secret number that allows you to spend bitcoin from your wallet.

Public Key: Publicly shareable key that cannot be used to spend bitcoin.

private key ---->(Eliptical curve multiplication algorithms) ----> Public Key ---->(RIPEMD(SHA256)) ----> Public key hash-----> (Base58check) -----> Wallet Address.

Wallet types:-

Non-deterministic Wallet: (random wallets) A wallet where private keys are generated from random numbers.

Deterministic Wallet: A wallet where addresses, private keys, and public keys can be traced back to their original seed words.

Hierarchical Deterministic Wallet: An advanced type of deterministic wallet that contains keys derived in a tree structure.

Generating private key:-

Private Key: A 256-bit random number between 1 and 2^{256} .

Entropy: Lack of order or predictability. The degree of disorder or randomness in the system.

Signing a Transaction:-

Signature: establish proof of ownership for each transaction on the blockchain.

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