

Blockseblock :Internship

Mini Task 1

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Theoretical Part:

1.

Q1. Create a comparison table or markdown sheet with the following columns for each platform:

Comparison Table								
Blockchain Name	Type	Consensus Used	Permission	Contract Support	Token Support	Typical Use Case	Technical Feature	Speed(TPS)
Ethereum (Public)	Public	Proof of Stake (Casper FFG)	Open	Yes (Solidity, Vyper)	Native (ETH)	dApps, DeFi, NFTs	Smart contract leader, EVM compatibility	~0.2-0.3 BPS (12-15s block time)
Hyperledger Fabric (Private)	Private	Pluggable (default Raft)	Permissioned	~1-2 BPS (depends on setup)	Yes (Chaincode in Go, Java, Node.js)	Enterprise applications	Modular & pluggable consensus, privacy	~1-2 BPS (depends on setup)
Quorum	Consortium	Istanbul BFT / Raft	Permissioned	Yes (Solidity, EVM compatible)	Native (ETH)	Financial services, enterprise apps	Private transactions, permissioning	~1-2 BPS

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Q2. Compare and contrast the technical capabilities of each.

Which platform would you choose for:

For a **decentralized app (dApp)**, I would choose **Ethereum**. Ethereum is a public blockchain that supports smart contracts and has a well-established ecosystem with tools and developer support. Its large community and proven security model make it ideal for open, trustless applications that need to operate independently of any single controlling entity.

For a **supply chain network among known partners**, I would select **Hyperledger Fabric**. Fabric is a permissioned blockchain, offering a modular architecture and high throughput. Its permissioned nature ensures that only authorized parties can join, which suits the semi-trusted environment of supply chains. Fabric's channels and private data collections also enable fine-grained data sharing and privacy.

For an **inter-bank financial application**, I'd choose **Corda**. Corda is designed specifically for financial institutions and offers a permissioned ledger model with strong privacy and identity management. It allows for point-to-point communication and minimizes data exposure to only the relevant parties in each transaction, meeting regulatory and privacy requirements for sensitive financial data.