Task Overview:
Choose one platform from each category:
Public Blockchain: (e.g., Ethereum, Bitcoin, Solana)
Private Blockchain: (e.g., Hyperledger Fabric, R3 Corda in private mode)
Consortium Blockchain: (e.g., R3 Corda, Quorum, IBM Food Trust)

Instructions:

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

Type (Public/Private/Consortium)
Consensus Mechanism Used
Permission Model (Open/Permissioned)
Speed / Throughput (TPS if available)
Smart Contract Support (Y/N + Language)
Token Support (Native or not)
Typical Use Case
Notable Technical Feature (e.g., privacy, pluggable consensus)

Blockchain Name	Type	Consensus Mechanism Used	Permission Model	Speed / Throughput	Token Support	Typical Use Case	Notable Technical Feature
Ethereum	Public	Proof of Stake (PoS)	Open	~30 TPS	Yes (Solidity, Vyper)	Decentra-lized finance, NFTs, DApps	EVM, large developer ecosystem
Hyperledger Fabric	Private	Pluggable (e.g., Raft, Katka)	Permissioned	1000+ TPS	Yes (Chaincode in Go, Java, Node.js)		Modular architecture, private channels
R3 Corda	Consortium	170+ TPS	Permissioned	No native token	Yes (JVM-based, Kotlin, Java)	Interbank transactions, regulated financial apps	Point to point transactions privacy
		Decentralized finance, NFTs, DApps	Permissioned	Optional via CorDapps	Optional via CorDapps		

2. Write a Short Report (150–200 words):
Compare and contrast the technical capabilities of each.
Which platform would you choose for:
A decentralized app?
A supply chain network among known partners?
An inter-bank financial application?
Justify your choice based on technical points.

Different blockchain platforms offer varying strengths based on their design and intended use.
Public blockchains like Ethereum, Solana, and Polkadot are known for their openness and
smart contract support. Ethereum, in particular, is widely used for decentralized apps (dApps)
due to its mature ecosystem, while Solana impresses with its high throughput, making it
suitable for real-time applications. Polkadot stands out with its ability to connect multiple
blockchains through parachains.
On the other hand, platforms like Hyperledger Fabric, Corda, and Quorum are designed for
enterprise use. Fabric is modular and supports private channels—ideal for supply chains.
Corda, built specifically for financial services, offers strong privacy and direct peer-to-peer
communication. Quorum brings Ethereum's flexibility into a permissioned environment with
added privacy features.
If I were to build a decentralized app, I'd go with Ethereum for its developer tools and
community support. For a supply chain involving known parties, Hyperledger Fabric fits best
due to its permissioned model and speed. And for inter-bank financial applications, Corda is
the top choice, as it provides privacy, compliance, and efficient contract handling.