**Blockchain assignment1**

1. Define Blockchain.
2. Explain ledger and wallet in details.
3. Discuss the concept of mining in blockchain.
4. Discuss the potential application of blockchains in the industry.
5. Discuss the concept of double-spending.
6. Define permissionless and permissioned blockchain.
7. What is Proof-of-Work algorithm? Discuss in details.
8. Discuss Proof-of-Stake algorithm in detail.
9. Write a note on consensus protocol.
10. List the challenges of a private blockchain.
11. Explain the term cryptocurrency.
12. Explain the various characteristics of cryptocurrency.
13. How do tokens differ from Altcoins?
14. Write an essay on Merkle Tree and Merkle root. How is Merkle tree created?
15. Define Smart Contract. List the benefits of Smart Contracts.
16. List the characteristics of Smart contracts.
17. Explain in details types of Smart Contract.
18. Write a basic solidity programming for subtract the difference between two numbers from the sum of two numbers.
19. Write a basic solidity programming to check whether a number is prime or not.
20. Explain Inheritance and types of Inheritance. Write a suitable example in Solidity.
21. Write a solidity program for multilevel inheritance.