REQUIRED Quiz Resources and Directions: Algorithms & Techniques - Week 3

Week 3 - Algorithms and Techniques

Quiz Directions

Task 1: Computing a block hash (Q2)

In this task, you are required to compute the block hash for Bitcoin block #490624. You can choose to use the tool we provided or you can manually follow the block hash algorithm as provided on the Bitcoin Wiki (Resource 3), linked above.

To compute the hash of a block using the **Bitcoin Block Hash Calculation** tool, open the link provided in the Resource 4 above. Get the details required to compute the block hash by exploring the Bitcoin block #490624 at **Resource 1. [Blockchain](), or Resource 2. [Bitcoin Block Explorer]().**

Even if you use the tool, it is recommended that you read about the block hashing algorithm using the Bitcoin Wiki website.

Task 2: Encrypting and decrypting a message (Q3)

In this task, you will perform the encryption and decryption of a message using the **Resource 5. [Encryption Tool]()** that we have provided. Follow the guidelines in the tool itself to better understand the concept of Public-Private key encryption

Quiz Resources

The following resources are provided to assist you in answering the quiz questions. We would like to acknowledge the authors of the various websites for their platform and transactions which help formed the basis for some sections of the lessons and modules.

Title of Resource: 1. [Blockchain]()

Resource Type: Website

Description: Blockchain is the world's leading software platform for digital assets. Offering the largest production blockchain platform in the world and using new technology to build a radically better

financial system. You can use this website to explore and answer questions related to Bitcoin Blockchain.

Title of Resource: 2. [Bitcoin Block Explorer](#)

Resource Type: Website

Description: Block Explorer is an open source web tool that allows you to view information about blocks, addresses, and transactions on the Bitcoin blockchain. You can use this website to explore and answer questions related to Bitcoin Blockchain.

Title of Resource: 3. [Bitcoin Wiki](#)

Resource Type: Website

Description: A public resource wiki page for the community of Bitcoin users, developers, and businesses as well as anyone interested in Bitcoin. Here you can find the Block hashing algorithm in detail.

Title of Resource: 4. [Bitcoin Block Hash Calculation](#)

Resource Type: Website

Description: Tool to calculate the hash of a bitcoin block.

Title of Resource: 5. [Encryption Tool](#)

Resource Type: Website

Description: Tool to understand the Public-Private key encryption and decryption algorithm with an example.