

Writing Smart Contracts

Assignment 01: Introduction

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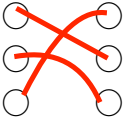
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Compulsory Exercise

Exercise 1. Write a short (≤ 2 sentences) definition of the following terms:

- (a) Hash
- (b) Address
- (c) Block
- (d) Consensus algorithm

Exercise 2. Which of the following cryptographic functions are required for what on the blockchain? Link with an arrow.

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|------------|---|---|---|
| Hashing |  |  | Ensure that transactions are authentic |
| Encryption |  |  | Ensure that transactions cannot be reversed |
| Signing |  |  | Ensure that transactions are secret |
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Exercise 3. Watch (or finish watching) the introduction to Algorand by Silvio Micali on Youtube: <https://www.youtube.com/watch?v=NykZ-ZSKkxM>

Exercise 4. Watch (or finish watching) the calculation of the SHA-256 algorithm by hand: <https://www.youtube.com/watch?v=y3dqhixzGVo>