# Anomaly Detection System in Blockchain
## Prototype: Double Spending Attack Simulation

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## Blockchain Playground - Balances

| Key | Value |
| --- | --- |
| Khurram | -5.0 |
| Shahzad | 5.0 |
| DefaultMiner | 1.0 |

## Blockchain Chain Snapshot (First 3 Blocks)

| Key | Value |
| --- | --- |
| Block 0 - Hash | 0005262683a524e22bae... |
| Block 0 - PrevHash | 0 |
| Block 0 - Nonce | 1659 |
| Block 0 - Transactions | 0 |
| Block 1 - Hash | 000b54666833d6ccc498... |
| Block 1 - PrevHash | 0005262683a524e22bae... |
| Block 1 - Nonce | 2110 |
| Block 1 - Transactions | 2 |

## Blockchain Growth Chart

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Blockchain Growth - Transactions per Block
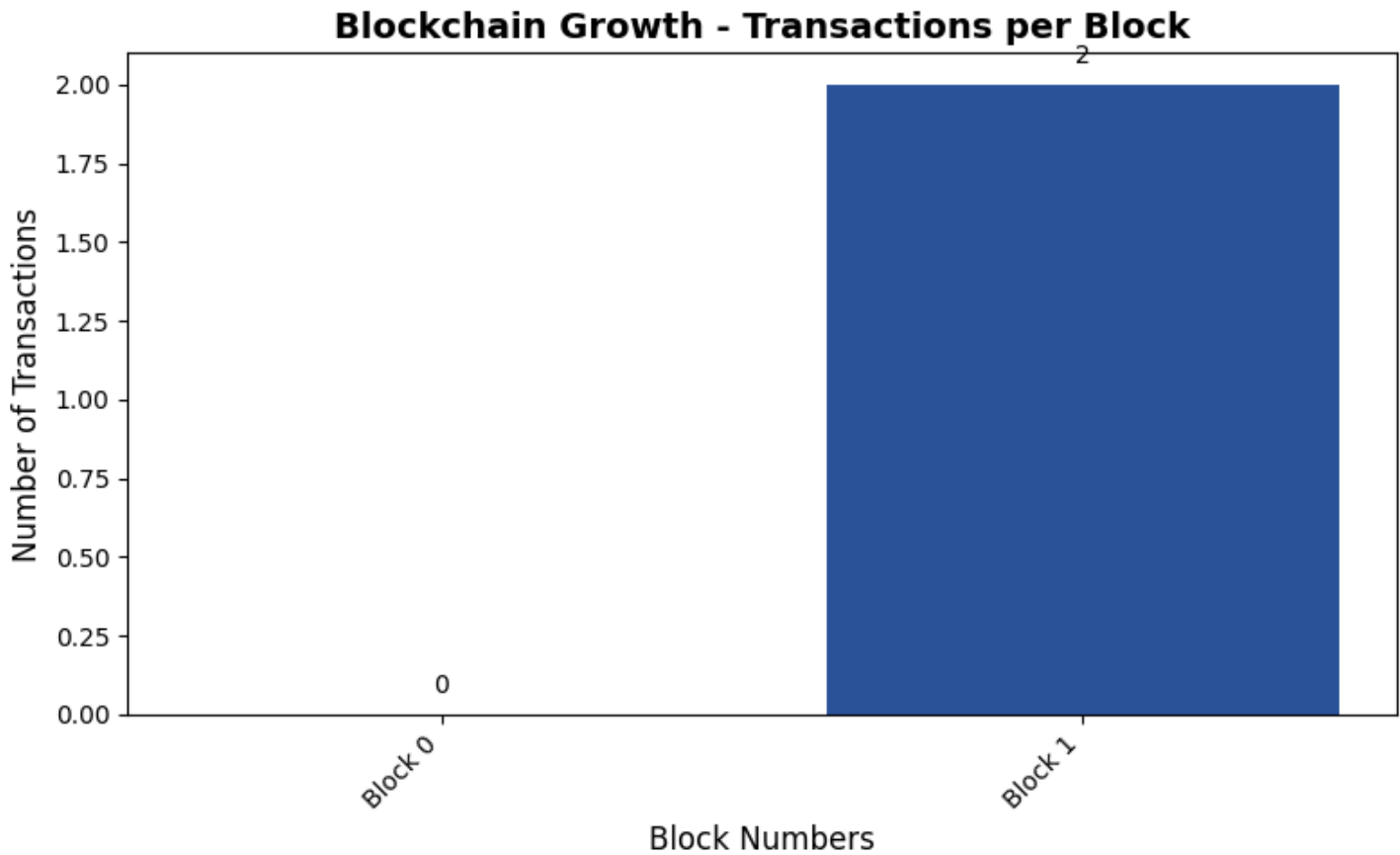
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## Recent Transactions

- Khurram -> Shahzad: 5.0 coins

## Mining Information

| | |
|---|---|
| Total Blocks: | 2 |
| Pending Transactions: | 1 |
| Current Difficulty: | 3 |
| Miner Reward: | 1.0 coins |

## P2P Network Status

| | |
|---|---|
| Connected Peers: | 0 |
| Node Address: | http://127.0.0.1:5000 |
| Network Status: | Standalone |

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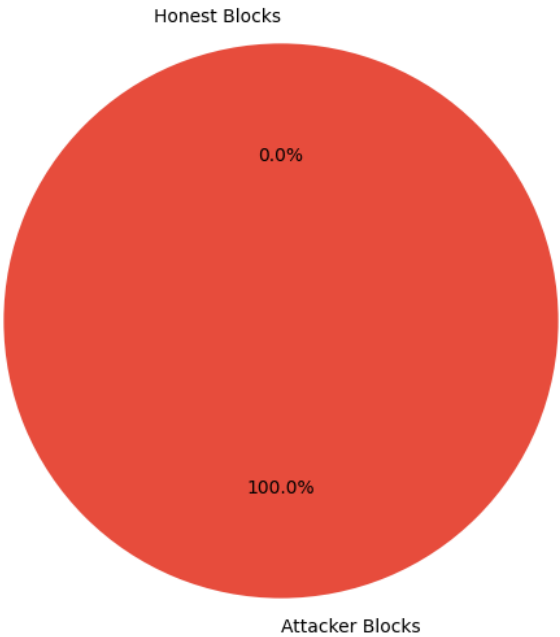VU ID: BC220200917

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## SimBlock Simulation Summary

| Key | Value |
| --- | --- |
| Attack Conclusion | Attack Successful! |
| Attack Successful | Yes |
| Attack Probability | 100.00% |
| Total Blocks | 4 |
| Avg Block Time | 21.62 ms |
| Forks Detected | 1 |
| Total Miners | 4 |

## Attack Simulation Analysis

Double-Spending Attack: Successful

The attacker successfully executed a double-spending attack.



Honest Blocks

0.0%

100.0%

Attacker Blocks

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Attacker Blocks: 4 (100.0%)

Honest Blocks: 0 (0.0%)