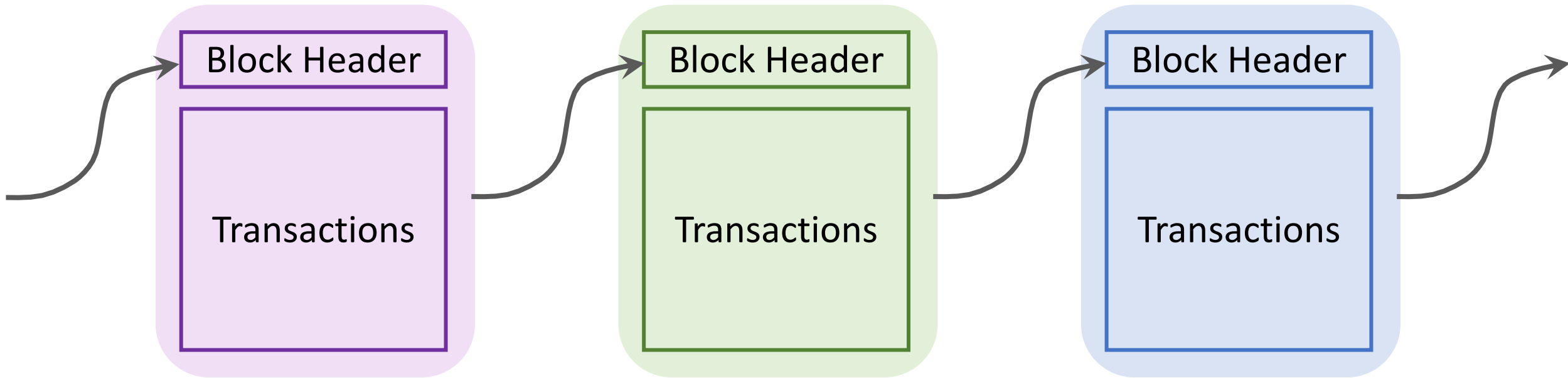


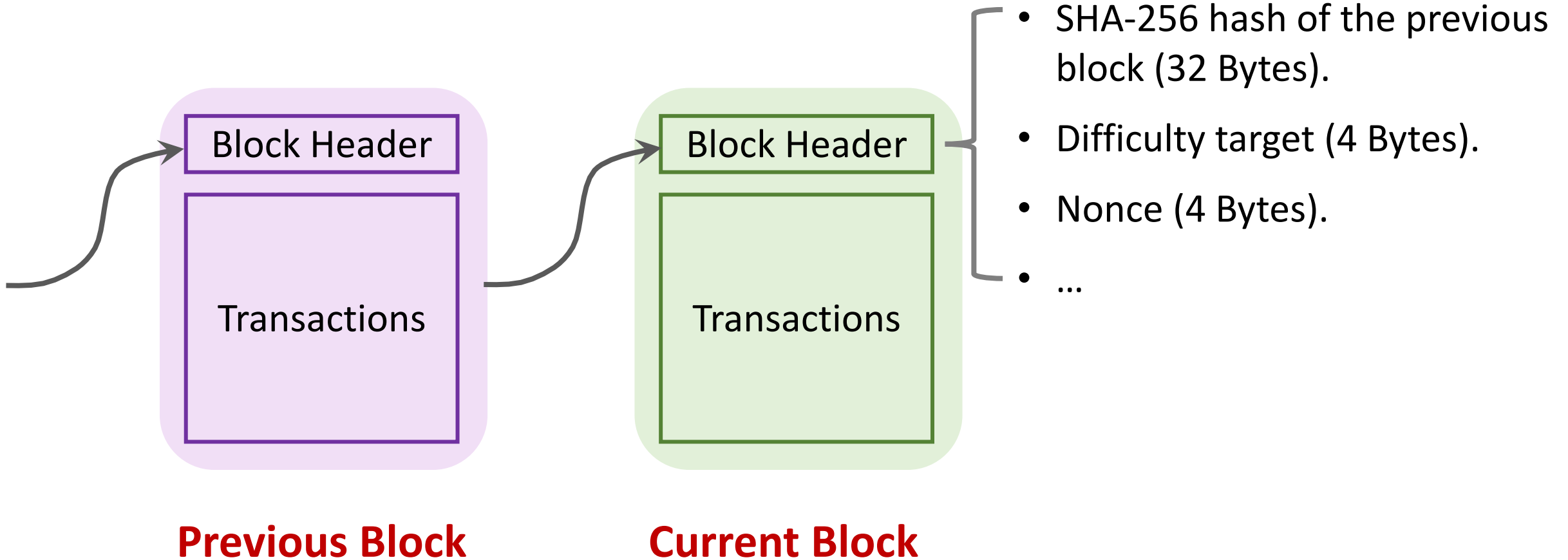
Blockchain

Shusen Wang

Solution: Blockchain



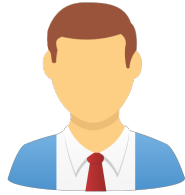
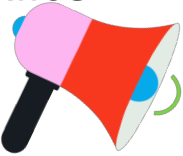
Inside a block



Mining



Alice



Bob

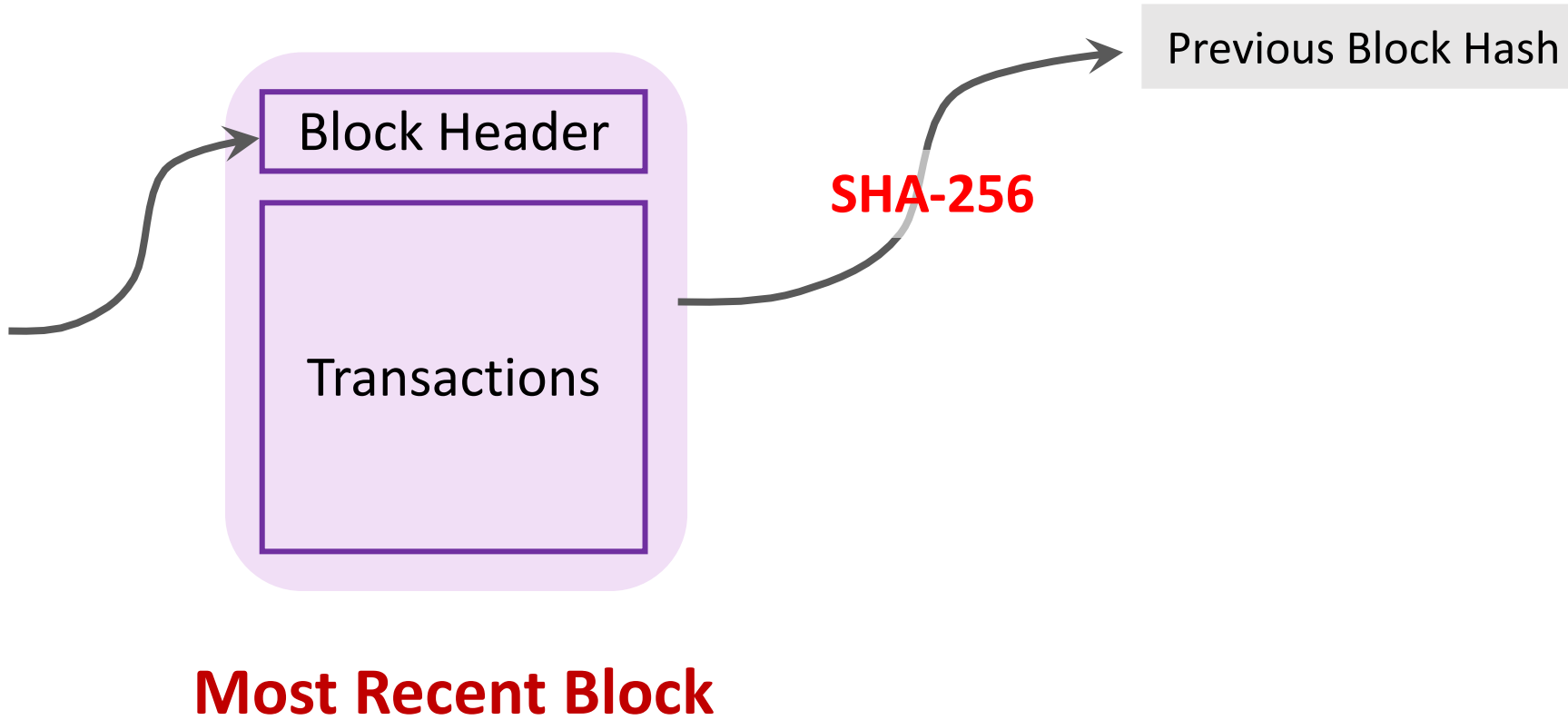


Chris

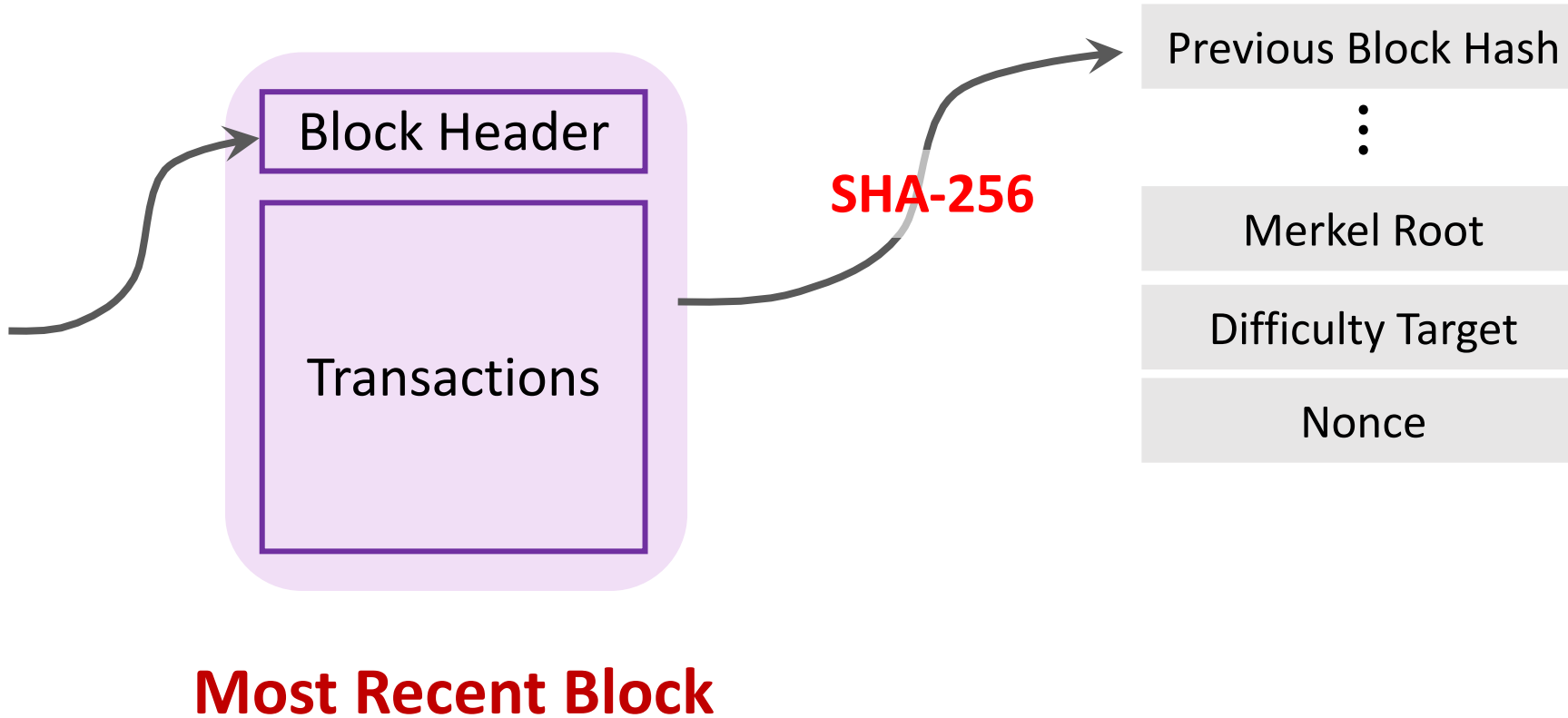
...



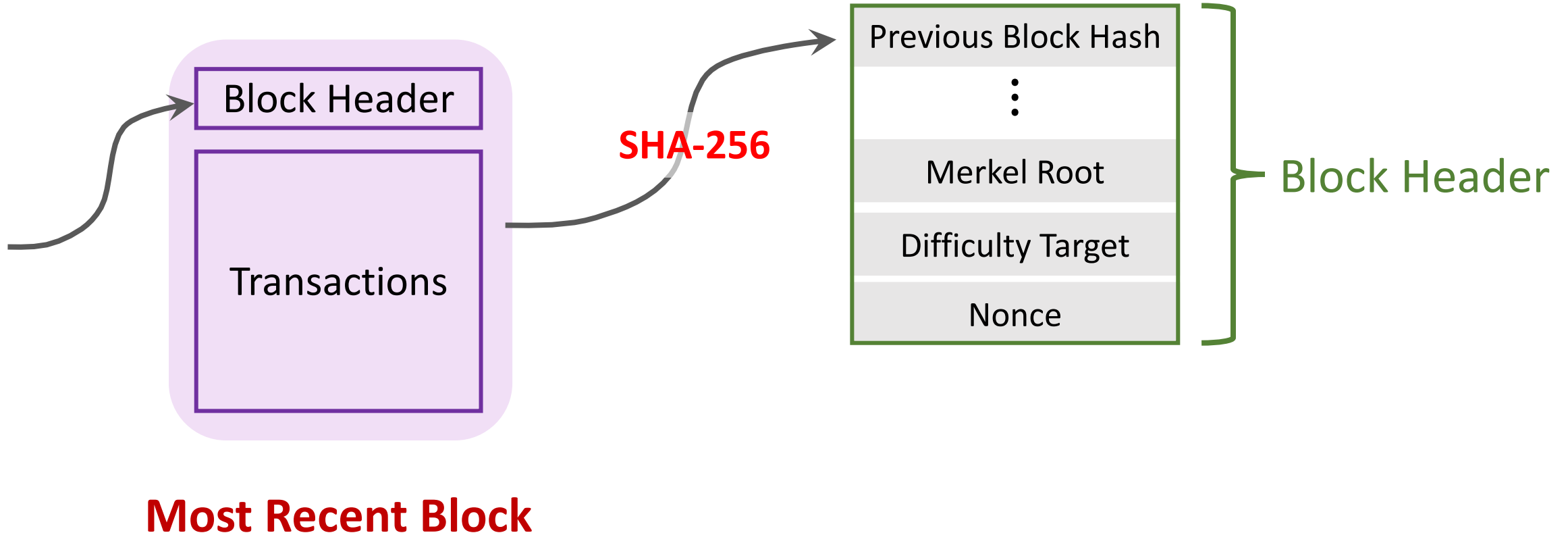
Create a block



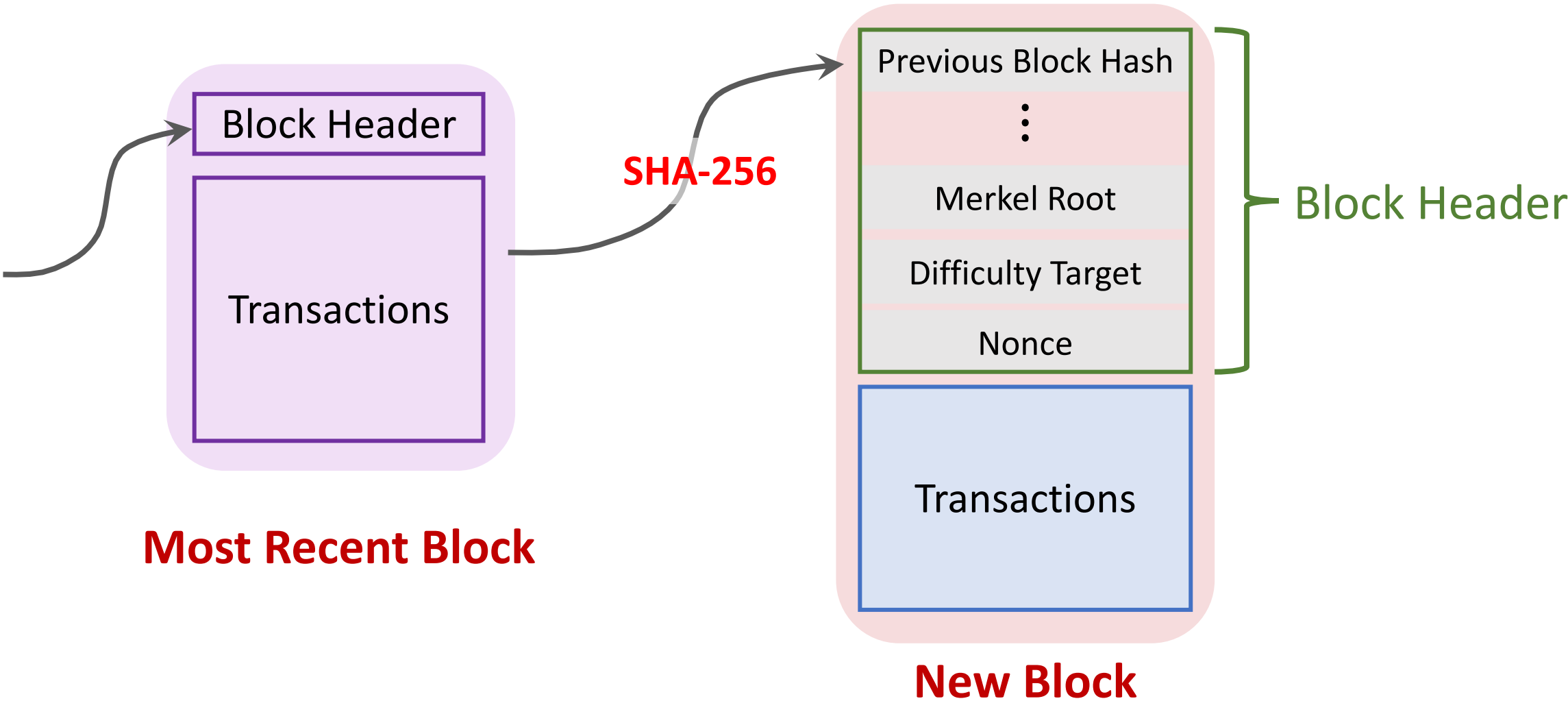
Create a block



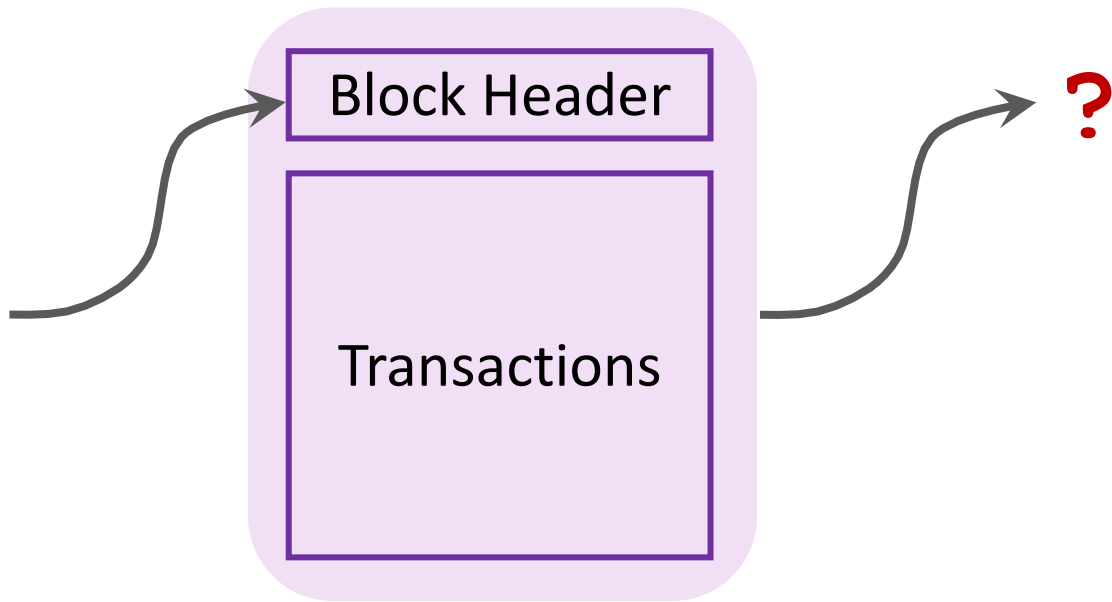
Create a block



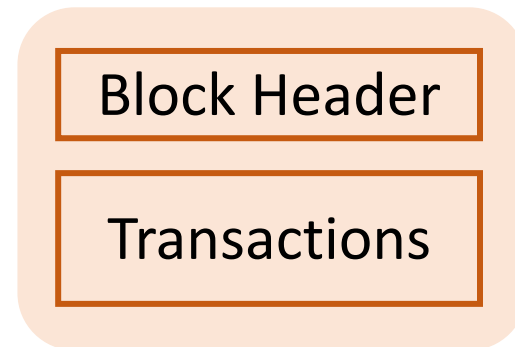
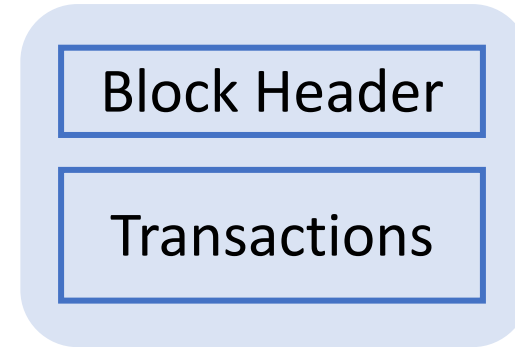
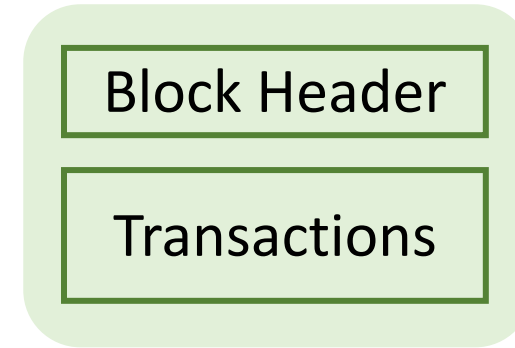
Create a block



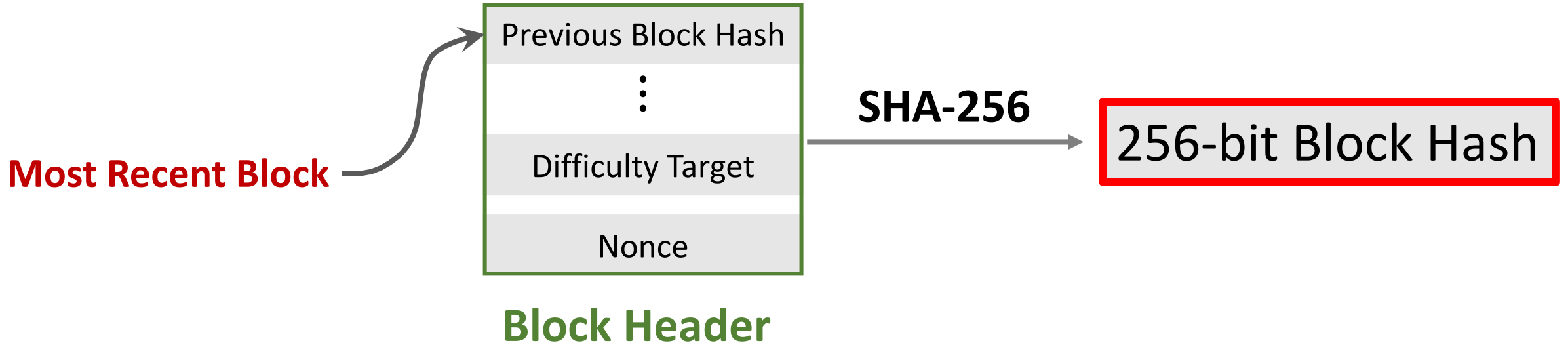
Create a block



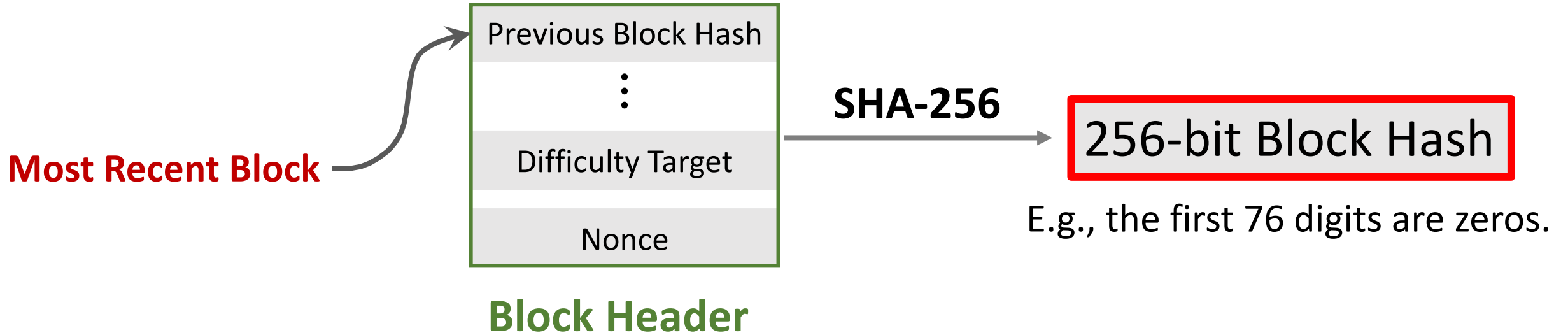
Most Recent Block




Proof of Work



Proof of Work

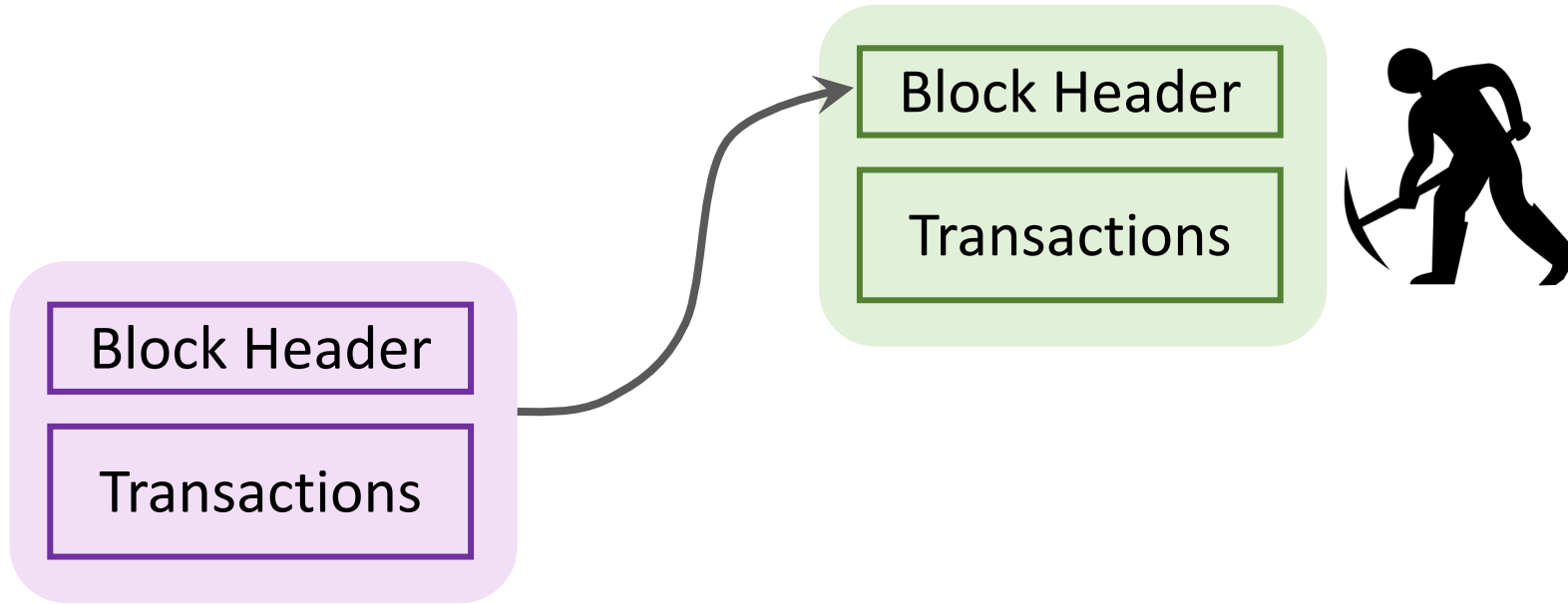


Proof of Work

Version	0x20400000	Block Hash	000000000000000000b7eb3e3f11b7770971d5a6707e93716a2ae347c984765
Difficulty	24.49 T / 15.14 T	Prev Block	00000000000000000001e8912638ab8ed959c2a3adba7d5acb9f586cf208da83
Bits	0x171297f6	Next Block	N/A
Nonce	0xb52e4650	Merkle Root	1141ea1e27c667684ee9bd9901264dcb6662c8ffd3ec21af69de7f8d924388a1
Relayed By	SlushPool		
Time	2020-05-24 22:03:42	Other Explorers	 BLOCKCHAIR

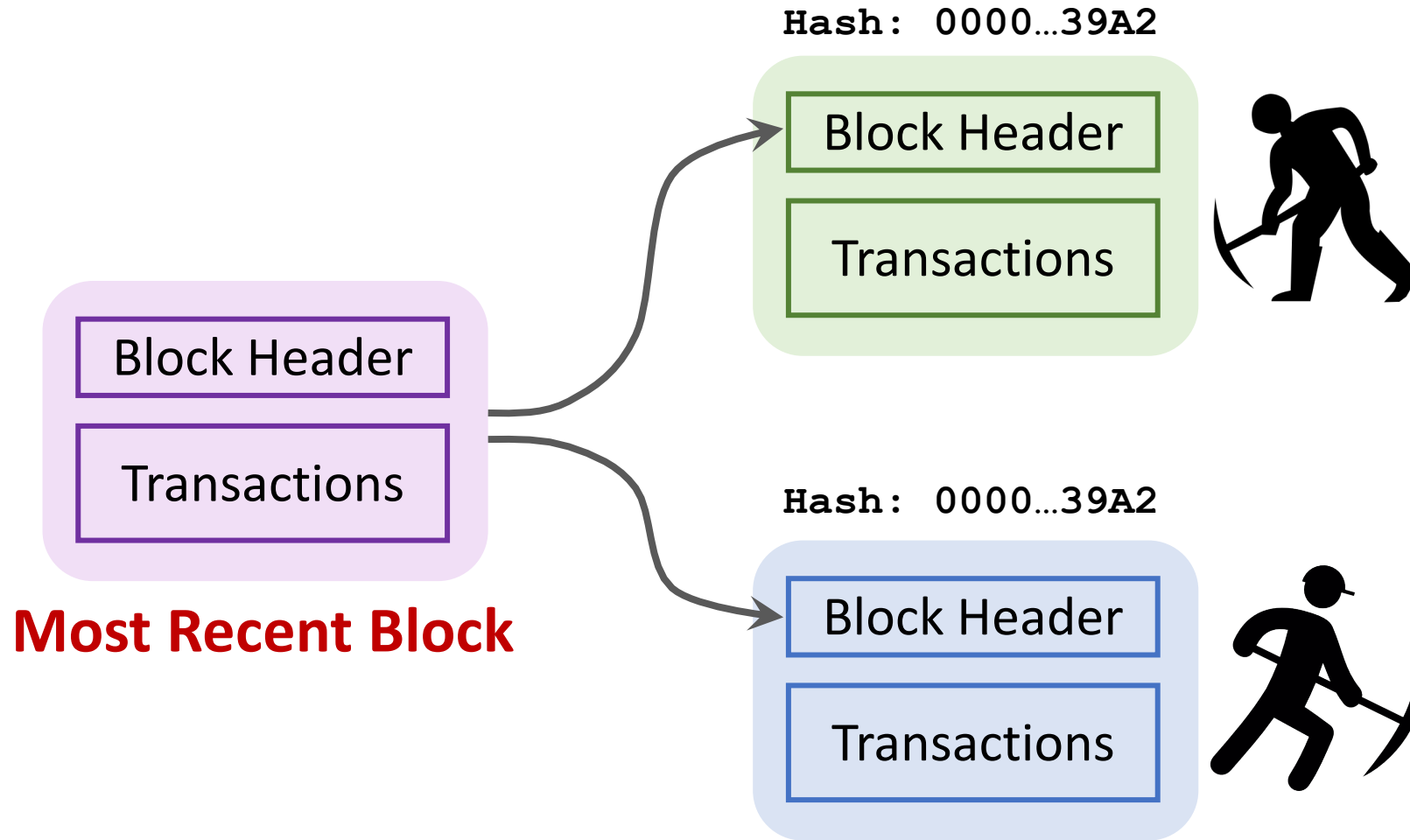
Proof of Work

Hash: 0000...39A2

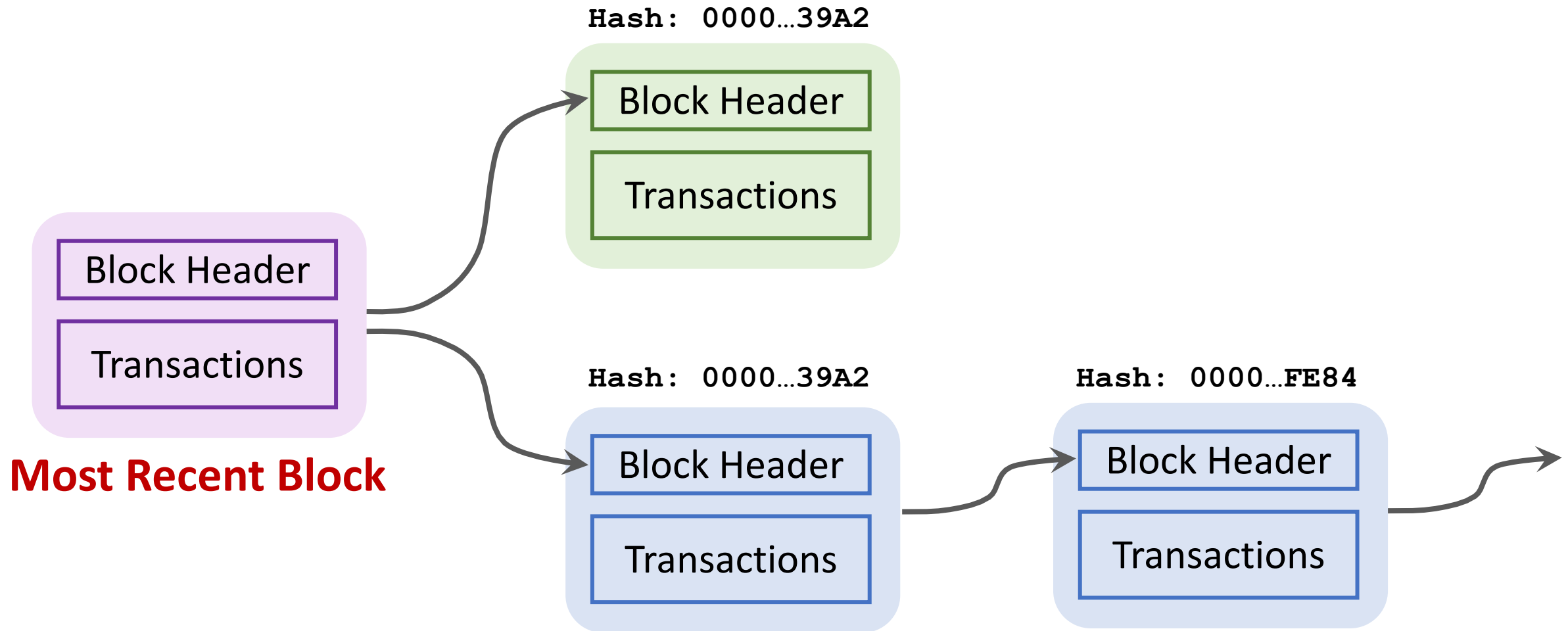


Most Recent Block

What if two blocks are created simultaneously?



What if two blocks are created simultaneously?



Adjust difficulty target

- Ideally, one block is created every 10 minutes.
- If compute power of miners grows, then it will take less time to create a block.
- The system adjusts the difficulty target to make the problem easier or harder. (Less or more bits of zeros in the block hash.)
- The difficulty target is adjusted every 2016 blocks (~2 weeks).

Thank You!