



**Fraud Proof  
Swaps**

**Tit-for-Tat  
Swaps**

**Discreet Log  
Swaps**

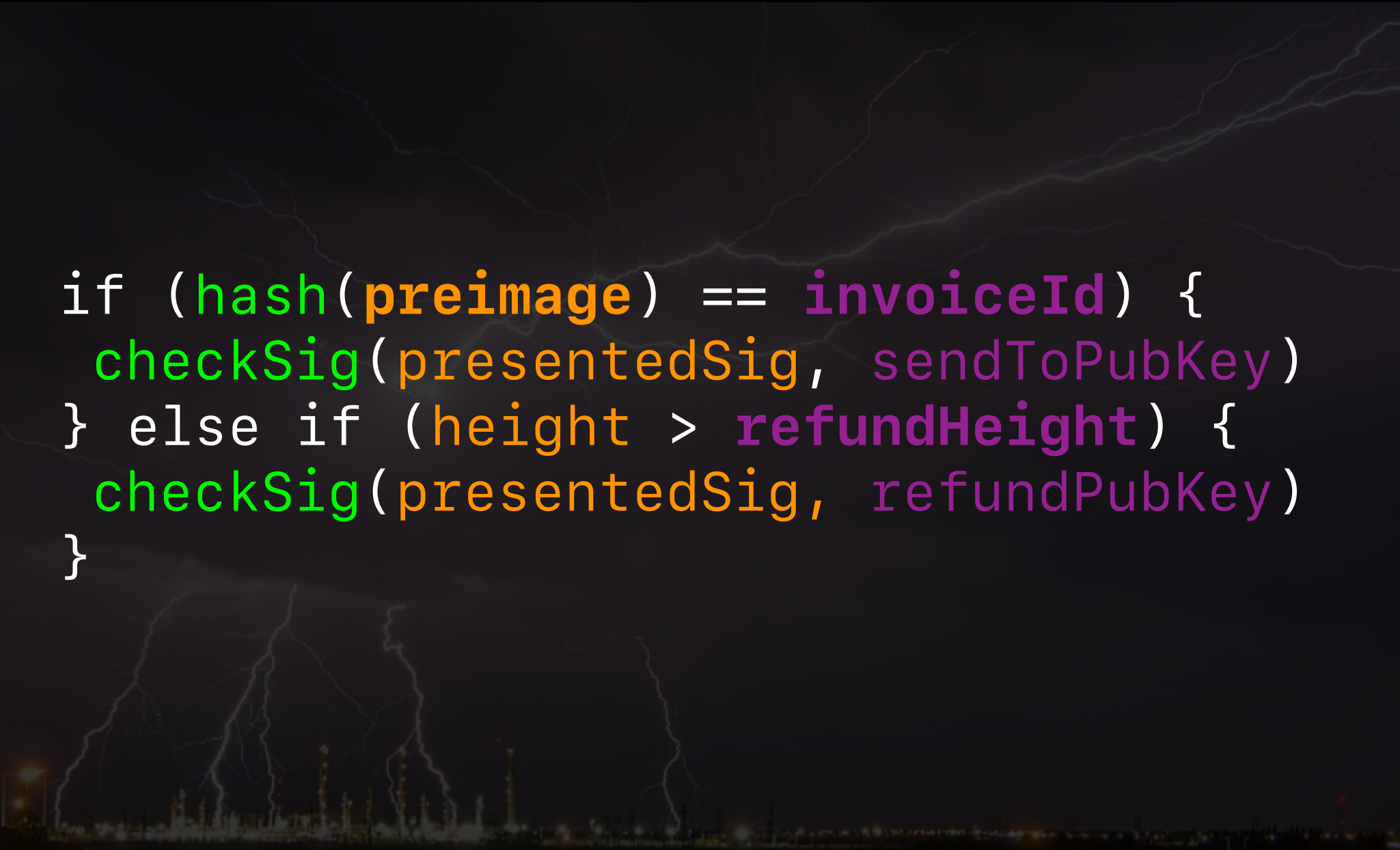
**DASHHTLC  
Swaps**

**PoW Rental  
Swaps**

**Submarine  
Swaps**

# Many LN Swap Types

Minimizing Trade Trust Requirements

A dark, stormy night sky with several bright, jagged lightning bolts striking down. The bottom of the image shows a faint, dark silhouette of a city skyline with some lights visible.

```
if (hash(preimage) == invoiceId) {  
    checkSig(presentedSig, sendToPubKey)  
} else if (height > refundHeight) {  
    checkSig(presentedSig, refundPubKey)  
}
```

# Simple Submarine Swaps

A stepping stone to Lightning. One side is already off-chain. The other side isn't ready for off-chain.