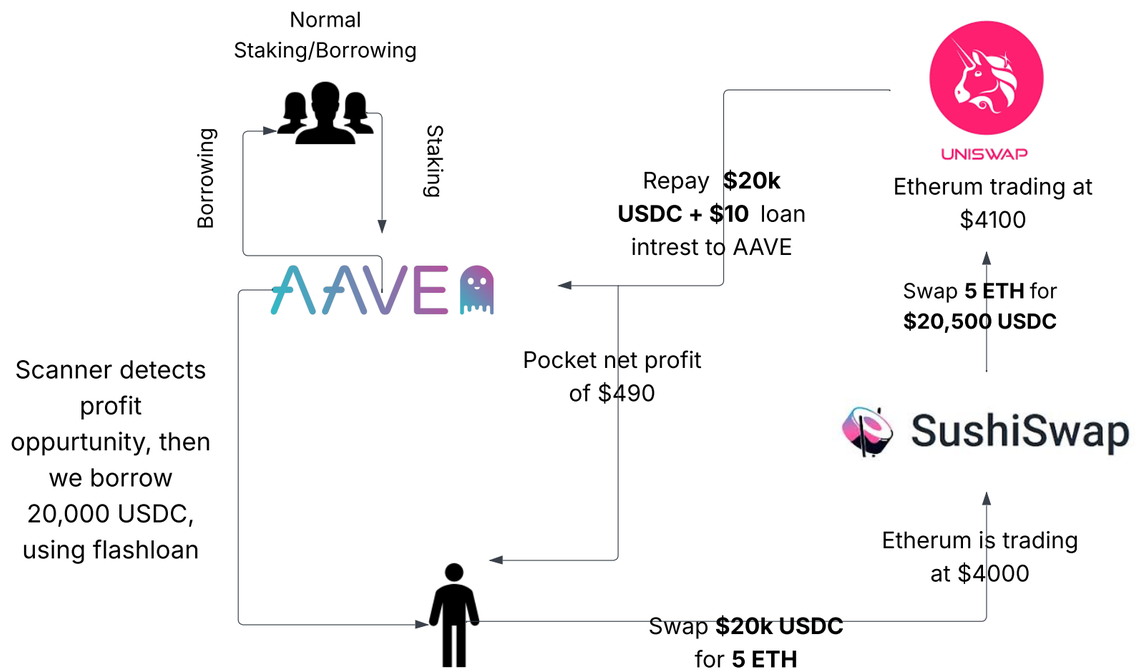
# What is a Flashloan ?

**P.1** People stake and borrow different crypto currencies at different rates in a defi lending protocol. A lending protocol like AAVE will have billions of dollars in liquidty across different blockchains (Ethereum mainnet, Base mainnet, Arbitrum), typically there is no due date on this 'borrowed money', because the collateral you stake has to be worth more then what you borrow. So if your Loan to Value ratio gets too high then the collateral you staked will get liquidated.




**P.2** However, there is another type of borrowing procedure you can do
called a Crypto Flash Loan. You can borrow hundreds of thousands if not millions collateral free. But the catch is the transaction is executed by code, and the money has to be payed back within the same block transaction (this is usually 5-10 secs). The code executes smart contracts, and a variety of protocols check to see if the loan can actually be paid back along with intrest. If not then the transaction reverts, and the money never leaves the lending protocol.

What are the applications of flashloans?

1. Debt refinancing 2. Liquidations 3. Collateral Swapping 4. Yield Optimization

5. **Arbitrage trading** which is what I was using flash loans for. When I first started the two DEX's (decentralized exchanges) I would scan for price discrepanices between were UNISWAP and SushiSwap.

**P.3** This is a simplified example of a **two-leg flashloan arbitrage**. In reality, you need optimize speed, gas fees, flashloan intrest, exchange fees and borrow amounts based of liquidty depth to maximize profits. Also if your scanner requests too much data, then you are eating away at RPC credits which cost money in the long term.