

Lesson 18

```
contracts > LiquidityPoolAsOracle.sol
1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.0;
3
4 // Check out Ethernaut: https://ethernaut.openzeppelin.com/
5 // For even more solidity security focused challenges
6
7 // Using a liquidity pool makes a contract vulnerable to flash loan attacks
8 // One should use a decentralized oracle network like Chainlink Data Feeds:
9 // https://docs.chain.link/docs/get-the-latest-price/
10
11 import "@openzeppelin/contracts/token/ERC20/IERC20.sol";
12 import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
13
14 contract LiquidityPoolAsOracle {
15     address public s_token1;
16     address public s_token2;
17
18     constructor(address token1, address token2) {
19         require(token1 != address(0x0), "Address cannot be 0");
20         require(token2 != address(0x0), "Address cannot be 0");
21         s_token1 = token1;
22         s_token2 = token2;
23     }
24
25     function swap(
26         address from,
27         address to,
28         uint256 amount
29     ) external {
30         require(
31             (from == s_token1 && to == s_token2) || (from == s_token2 && to == s_token1),
32             "Invalid tokens"
33         );
34     }
35 }
```