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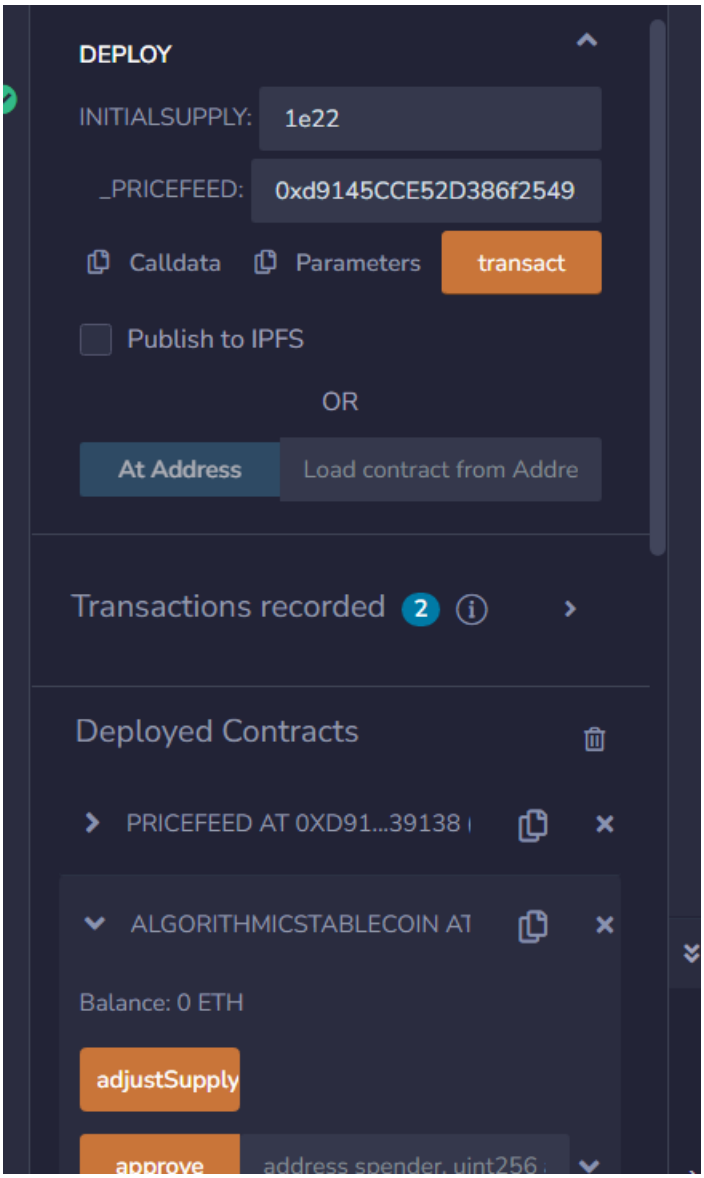
完善合约代码

03_AlgorithmicStableCoin_start.sol

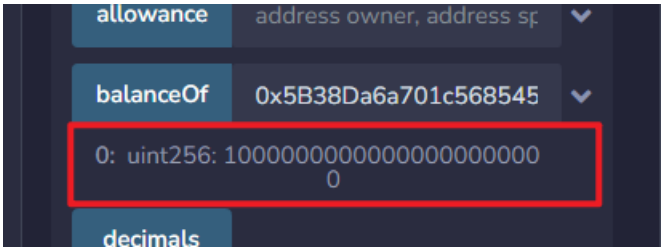
```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
import "@openzeppelin/contracts/access/Ownable.sol";
import "./03_PriceFeed.sol";

contract AlgorithmicStablecoin is ERC20, Ownable {
    PriceFeed internal priceFeed;

    uint256 public targetPrice = 1 * 10 ** 8; // Target price of 1 USD
with 8 decimals
    uint256 public expansionPercentage = 5; // 5% expansion or
contraction

    constructor(
        uint256 initialSupply,
        address _priceFeed
    ) ERC20("Algo ZYN", "ALZYN") {
        super._mint(msg.sender, initialSupply);
        priceFeed = PriceFeed(_priceFeed);
    }

    function getLatestPrice() public view returns (uint256) {
        return priceFeed.getLatestPrice();
    }

    function adjustSupply() public onlyOwner {
        uint256 newTotalSupply = (expansionPercentage *
balanceOf(msg.sender)) / 100;
        if (getLatestPrice() > targetPrice) {
            _mint(msg.sender, newTotalSupply);
        } else {
            _burn(msg.sender, newTotalSupply);
        }
    }
}
```

实验过程

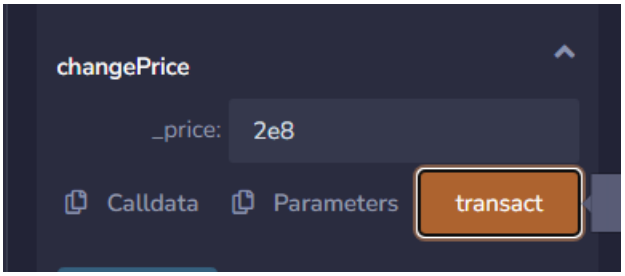
1. 部署合约



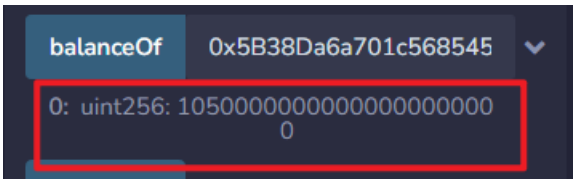
2. 查看 owner 余额



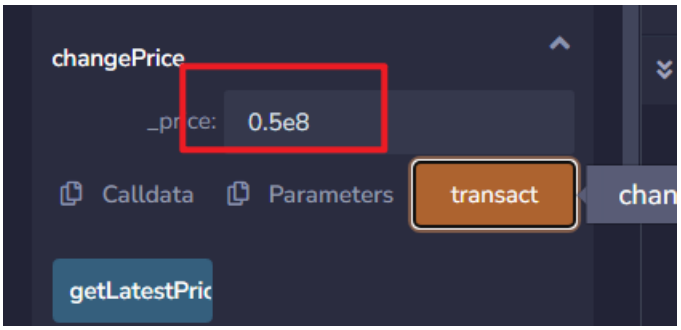
3. 修改价格为 2e8



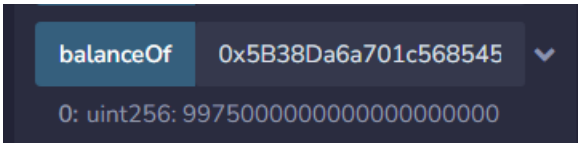
4. 调用 adjustsupply
5. 查看 owner 余额



6. 修改价格为 0.5e8



7. 调用 adjustsupply
8. 查看 owner 余额



9. 9975 是如何计算出来的?
totalsupply*(1+5%)*(1-5%)=9975