**Whitelisted ERC20 Token**

**Task Description:**

Implement MyToken contract which is a regular ERC20 token but with some modifications.

The MyToken contract should be deployed with the following parameters:

* Token Name: My Token
* Token Symbol: MT
* Decimals: 4

This token should be Ownable, where **only the owner should have access to the token minting and whitelist mechanism**.

Whitelist mechanism - it is a special restriction on the contract to limit transfer functionality.

Those restrictions are:

* Revert if transfer is to a contract address
* If the contract address is in the whitelist, transfer should proceed as usual
* Transfer to EOA also should work as usual
* Minting and burning should work as usual, too

Technically whitelist is a mapping. You will have to implement the following function to manage it:

1. addToWhitelist() - This function should add a new address to the whitelist.
2. removeFromWhitelist() - This function should remove an address from the whitelist.

**Limitations:**

* **Do not** override the initial transfer function. All transfers, i.e., \_transfer, transfer, or transferFrom should remain unchanged.
* You are not allowed to modify the BaseToken contract.

**What to hand in:**

1. Deploy and verify the MyToken contract.
2. Transfer ownership to the [validator](https://sepolia.etherscan.io/address/0xC00354686F11BFE4296bAc53950e66a07a700aB4#code) contract.
3. In the [validator](https://sepolia.etherscan.io/address/0xC00354686F11BFE4296bAc53950e66a07a700aB4#writeContract) contract, call validate() to check if the task is implemented correctly.
4. Provide the link to the verified MyToken contract.