

```

1  // SPDX-License-Identifier: MIT
2  // OpenZeppelin Contracts (last updated v4.6.0) (token/ERC20/IERC20.sol)
3
4  pragma solidity ^0.8.0;
5
6  /**
7   * @dev Interface of the ERC20 standard as defined in the EIP.
8   */
9  interface IERC20 {
10     /**
11      * @dev Emitted when `value` tokens are moved from one account (`from`) to
12      * another (`to`).
13      *
14      * Note that `value` may be zero.
15      */
16     event Transfer(address indexed from, address indexed to, uint256 value);
17
18     /**
19      * @dev Emitted when the allowance of a `spender` for an `owner` is set by
20      * a call to {approve}. `value` is the new allowance.
21      */
22     event Approval(address indexed owner, address indexed spender, uint256 value);
23
24     /**
25      * @dev Returns the amount of tokens in existence.
26      */
27     function totalSupply() external view returns (uint256);
28
29     /**
30      * @dev Returns the amount of tokens owned by `account`.
31      */
32     function balanceOf(address account) external view returns (uint256);
33
34     /**
35      * @dev Moves `amount` tokens from the caller's account to `to`.
36      *
37      * Returns a boolean value indicating whether the operation succeeded.
38      *
39      * Emits a {Transfer} event.
40      */
41     function transfer(address to, uint256 amount) external returns (bool);
42
43     /**
44      * @dev Returns the remaining number of tokens that `spender` will be
45      * allowed to spend on behalf of `owner` through {transferFrom}. This is
46      * zero by default.
47      *
48      * This value changes when {approve} or {transferFrom} are called.
49      */
50     function allowance(address owner, address spender) external view returns (uint256);
51
52     /**
53      * @dev Sets `amount` as the allowance of `spender` over the caller's tokens.
54      *
55      * Returns a boolean value indicating whether the operation succeeded.
56      *
57      * IMPORTANT: Beware that changing an allowance with this method brings the risk
58      * that someone may use both the old and the new allowance by unfortunate
59      * transaction ordering. One possible solution to mitigate this race
60      * condition is to first reduce the spender's allowance to 0 and set the
61      * desired value afterwards:
62      * https://github.com/ethereum/EIPs/issues/20#issuecomment-263524729
63      *
64      * Emits an {Approval} event.
65      */
66     function approve(address spender, uint256 amount) external returns (bool);
67
68     /**
69      * @dev Moves `amount` tokens from `from` to `to` using the
70      * allowance mechanism. `amount` is then deducted from the caller's
71      * allowance.
72      */

```

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73     * Returns a boolean value indicating whether the operation succeeded.
74     *
75     * Emits a {Transfer} event.
76     */
77     function transferFrom(
78         address from,
79         address to,
80         uint256 amount
81     ) external returns (bool);
82 }
83
```