pragma solidity ^0.5.0;

/\*\*

\* @dev Interface of the ERC20 standard as defined in the EIP. Does not include

\* the optional functions; to access them see {ERC20Detailed}.

\*/

interface IERC20 {

/\*\*

\* @dev Returns the amount of tokens in existence.

\*/

function totalSupply() external view returns (uint256);

/\*\*

\* @dev Returns the amount of tokens owned by `account`.

\*/

function balanceOf(address account) external view returns (uint256);

/\*\*

\* @dev Moves `amount` tokens from the caller's account to `recipient`.

\*

\* Returns a boolean value indicating whether the operation succeeded.

\*

\* Emits a {Transfer} event.

\*/

function transfer(address recipient, uint256 amount) external returns (bool);

/\*\*

\* @dev Returns the remaining number of tokens that `spender` will be

\* allowed to spend on behalf of `owner` through {transferFrom}. This is

\* zero by default.

\*

\* This value changes when {approve} or {transferFrom} are called.

\*/

function allowance(address owner, address spender) external view returns (uint256);

/\*\*

\* @dev Sets `amount` as the allowance of `spender` over the caller's tokens.

\*

\* Returns a boolean value indicating whether the operation succeeded.

\*

\* IMPORTANT: Beware that changing an allowance with this method brings the risk

\* that someone may use both the old and the new allowance by unfortunate

\* transaction ordering. One possible solution to mitigate this race

\* condition is to first reduce the spender's allowance to 0 and set the

\* desired value afterwards:

\* <https://github.com/ethereum/EIPs/issues/20#issuecomment-263524729>

\*

\* Emits an {Approval} event.

\*/

function approve(address spender, uint256 amount) external returns (bool);

/\*\*

\* @dev Moves `amount` tokens from `sender` to `recipient` using the

\* allowance mechanism. `amount` is then deducted from the caller's

\* allowance.

\*

\* Returns a boolean value indicating whether the operation succeeded.

\*

\* Emits a {Transfer} event.

\*/

function transferFrom(address sender, address recipient, uint256 amount) external returns (bool);

/\*\*

\* @dev Emitted when `value` tokens are moved from one account (`from`) to

\* another (`to`).

\*

\* Note that `value` may be zero.

\*/

event Transfer(address indexed from, address indexed to, uint256 value);

/\*\*

\* @dev Emitted when the allowance of a `spender` for an `owner` is set by

\* a call to {approve}. `value` is the new allowance.

\*/

event Approval(address indexed owner, address indexed spender, uint256 value);

}