// SPDX-License-Identifier: GPL-3.0

pragma solidity ^0.8.8;

contract BiddingAuction {

address public auctioneer;

address public highestBidder;

uint public highestBid;

modifier onlyAuctioneer() {

require(msg.sender == auctioneer, "You are not the auctioneer");

\_;

}

constructor() {

auctioneer = msg.sender;

}

function placeBid() external payable {

require(msg.value > highestBid, "Bid amount invalid");

if (highestBidder != address(0)) {

payable(highestBidder).transfer(highestBid);

}

highestBidder = msg.sender;

highestBid = msg.value;

}

function endAuction() external onlyAuctioneer {

require(highestBidder != address(0), "Auction not started");

// Transfer funds and reset variables

payable(auctioneer).transfer(highestBid);

highestBidder = address(0);

highestBid = 0;

}

}