



**TrustRise**  
(TRISE)

Total Score

**97.0**/100

Decentralization

**99**/100

Security

**95**/100

Code Quality

**97**/100

## Warnings

**Owner entitled to exclude from reward** [564 - 564]

The owner can exclude an address from receiving rewards.



**Owner entitled to include in reward** [574 - 574]

The owner can include an address in receiving rewards.



```
pragma solidity ^0.8.0;
5
6
7interface IBEP20 {
8
9function totalSupply() external view returns (uint256);
10
11function balanceOf(address account) external view returns (uint256);
12
13function transfer(address recipient, uint256 amount) external returns (bool);
14
15function allowance(address owner, address spender) external view returns (uint256);
16
17function approve(address spender, uint256 amount) external returns (bool);
18
19function transferFrom(address sender, address recipient, uint256 amount) external returns (bool);
20
21event Transfer(address indexed from, address indexed to, uint256 value);
22
23event Approval(address indexed owner, address indexed spender, uint256 value);
24}
25
26
27library SafeMath {
28
29function add(uint256 a, uint256 b) internal pure returns (uint256) {
30uint256 c = a + b;
31require(c >= a, "SafeMath: addition overflow");
32
33return c;
34}
35
36function sub(uint256 a, uint256 b) internal pure returns (uint256) {
37return sub(a, b, "SafeMath: subtraction overflow");
38}
39
40function sub(uint256 a, uint256 b, string memory errorMessage) internal pure returns (uint256) {
41require(b <= a, errorMessage);
42uint256 c = a - b;
43
44return c;
45}
46
47function mul(uint256 a, uint256 b) internal pure returns (uint256) {
48if (a == 0) {
49return 0;
50}
51
52uint256 c = a * b;
53require(c / a == b, "SafeMath: multiplication overflow");
54
55return c;
```

```

56 }
57
58 function div(uint256 a, uint256 b) internal pure returns (uint256) {
59     return div(a, b, "SafeMath: division by zero");
60 }
61
62 function div(uint256 a, uint256 b, string memory errorMessage) internal pure returns (uint256) {
63     require(b > 0, errorMessage);
64     uint256 c = a / b;
65
66     return c;
67 }
68
69 function mod(uint256 a, uint256 b) internal pure returns (uint256) {
70     return mod(a, b, "SafeMath: modulo by zero");
71 }
72
73 function mod(uint256 a, uint256 b, string memory errorMessage) internal pure returns (uint256) {
74     require(b != 0, errorMessage);
75     return a % b;
76 }
77 }
78
79 abstract contract Context {
80     function _msgSender() internal view virtual returns (address) {
81         return msg.sender;
82     }
83
84     function _msgData() internal view virtual returns (bytes memory) {
85         this;
86         return msg.data;
87     }
88 }
89
90
91 library Address {
92
93     function isContract(address account) internal view returns (bool) {
94
95         bytes32 codehash;
96         bytes32 accountHash =;
97         assembly { codehash := extcodehash(account) }
98         return (codehash != accountHash && codehash != 0x0);
99     }
100
101     function sendValue(address payable recipient, uint256 amount) internal {
102         require(address(this).balance >= amount, "Address: insufficient balance");
103
104         (bool success, ) = recipient.call{ value: amount }("");
105         require(success, "Address: unable to send value, recipient may have reverted");
106     }
107
108     function functionCall(address target, bytes memory data) internal returns (bytes memory) {
109         return functionCall(target, data, "Address: low-level call failed");
110     }
111
112     function functionCall(address target, bytes memory data, string memory errorMessage) internal returns (bytes memory) {
113         return _functionCallWithValue(target, data, 0, errorMessage);
114     }
115
116     function functionCallWithValue(address target, bytes memory data, uint256 value) internal returns (bytes memory) {
117         return functionCallWithValue(target, data, value, "Address: low-level call with value failed");
118     }
119
120     function functionCallWithValue(address target, bytes memory data, uint256 value, string memory errorMessage) internal returns (bytes memory) {
121         require(address(this).balance >= value, "Address: insufficient balance for call");
122         return _functionCallWithValue(target, data, value, errorMessage);
123     }
124
125     function _functionCallWithValue(address target, bytes memory data, uint256 weiValue, string memory errorMessage) private returns (bytes memory) {
126         require(isContract(target), "Address: call to non-contract");
127
128         (bool success, bytes memory returndata) = target.call{ value: weiValue }(data);
129         if (success) {
130             return returndata;
131         } else {
132             if (returndata.length > 0) {
133
134                 assembly {
135                     let returndata_size := mload(returndata)
136                     revert(add(32, returndata), returndata_size)
137                 }
138             } else {
139                 revert(errorMessage);
140             }
141         }
142     }
143 }
144
145 contract Ownable is Context {
146     address private _owner;
147     address private _previousOwner;
148     uint256 private _lockTime;

```

```

149
150 event OwnershipTransferred(address indexed previousOwner, address indexed newOwner);
151
152 constructor () {
153     address msgSender = _msgSender();
154     _owner = msg.sender;
155     emit OwnershipTransferred(address(0), msgSender);
156 }
157
158 function owner() public view returns (address) {
159     return _owner;
160 }
161
162 modifier onlyOwner() {
163     require(_owner == _msgSender(), "Ownable: caller is not the owner");
164     _;
165 }
166
167 function renounceOwnership() public virtual onlyOwner {
168     emit OwnershipTransferred(_owner, address(0));
169     _owner = address(0);
170 }
171
172 function transferOwnership(address newOwner) public virtual onlyOwner {
173     require(newOwner != address(0), "Ownable: new owner is the zero address");
174     emit OwnershipTransferred(_owner, newOwner);
175     _owner = newOwner;
176 }
177
178}
179
180// pragma solidity >=0.5.0;
181
182interface IUniswapV2Factory {
183     event PairCreated(address indexed token0, address indexed token1, address pair, uint);
184
185     function feeTo() external view returns (address);
186     function feeToSetter() external view returns (address);
187
188     function getPair(address tokenA, address tokenB) external view returns (address pair);
189     function allPairs(uint) external view returns (address pair);
190     function allPairsLength() external view returns (uint);
191
192     function createPair(address tokenA, address tokenB) external returns (address pair);
193
194     function setFeeTo(address) external;
195     function setFeeToSetter(address) external;
196 }
197
198
199// pragma solidity >=0.5.0;
200
201interface IUniswapV2Pair {
202     event Approval(address indexed owner, address indexed spender, uint value);
203     event Transfer(address indexed from, address indexed to, uint value);
204
205     function name() external pure returns (string memory);
206     function symbol() external pure returns (string memory);
207     function decimals() external pure returns (uint8);
208     function totalSupply() external view returns (uint);
209     function balanceOf(address owner) external view returns (uint);
210     function allowance(address owner, address spender) external view returns (uint);
211
212     function approve(address spender, uint value) external returns (bool);
213     function transfer(address to, uint value) external returns (bool);
214     function transferFrom(address from, address to, uint value) external returns (bool);
215
216     function DOMAIN_SEPARATOR() external view returns (bytes32);
217     function PERMIT_TYPEHASH() external pure returns (bytes32);
218     function nonces(address owner) external view returns (uint);
219
220     function permit(address owner, address spender, uint value, uint deadline, uint8 v, bytes32 r, bytes32 s) external;
221
222     event Mint(address indexed sender, uint amount0, uint amount1);
223     event Burn(address indexed sender, uint amount0, uint amount1, address indexed to);
224     event Swap(
225         address indexed sender,
226         uint amount0In,
227         uint amount1In,
228         uint amount0Out,
229         uint amount1Out,
230         address indexed to
231     );
232     event Sync(uint112 reserve0, uint112 reserve1);
233
234     function MINIMUM_LIQUIDITY() external pure returns (uint);
235     function factory() external view returns (address);
236     function token0() external view returns (address);
237     function token1() external view returns (address);
238     function getReserves() external view returns (uint112 reserve0, uint112 reserve1, uint32 blockTimestampLast);
239     function price0CumulativeLast() external view returns (uint);
240     function price1CumulativeLast() external view returns (uint);
241     function kLast() external view returns (uint);
242
243     function mint(address to) external returns (uint liquidity);

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244 function burn(address to) external returns (uint amount0, uint amount1);
245 function swap(uint amount0Out, uint amount1Out, address to, bytes calldata data) external;
246 function skim(address to) external;
247 function sync() external;
248
249 function initialize(address, address) external;
250}
251
252// pragma solidity >=0.6.2;
253
254interface IUniswapV2Router01 {
255 function factory() external pure returns (address);
256 function WETH() external pure returns (address);
257
258 function addLiquidity(
259 address tokenA,
260 address tokenB,
261 uint amountADesired,
262 uint amountBDesired,
263 uint amountAMin,
264 uint amountBMin,
265 address to,
266 uint deadline
267 ) external returns (uint amountA, uint amountB, uint liquidity);
268 function addLiquidityETH(
269 address token,
270 uint amountTokenDesired,
271 uint amountTokenMin,
272 uint amountETHMin,
273 address to,
274 uint deadline
275 ) external payable returns (uint amountToken, uint amountETH, uint liquidity);
276 function removeLiquidity(
277 address tokenA,
278 address tokenB,
279 uint liquidity,
280 uint amountAMin,
281 uint amountBMin,
282 address to,
283 uint deadline
284 ) external returns (uint amountA, uint amountB);
285 function removeLiquidityETH(
286 address token,
287 uint liquidity,
288 uint amountTokenMin,
289 uint amountETHMin,
290 address to,
291 uint deadline
292 ) external returns (uint amountToken, uint amountETH);
293 function removeLiquidityWithPermit(
294 address tokenA,
295 address tokenB,
296 uint liquidity,
297 uint amountAMin,
298 uint amountBMin,
299 address to,
300 uint deadline,
301 bool approveMax, uint8 v, bytes32 r, bytes32 s
302 ) external returns (uint amountA, uint amountB);
303 function removeLiquidityETHWithPermit(
304 address token,
305 uint liquidity,
306 uint amountTokenMin,
307 uint amountETHMin,
308 address to,
309 uint deadline,
310 bool approveMax, uint8 v, bytes32 r, bytes32 s
311 ) external returns (uint amountToken, uint amountETH);
312 function swapExactTokensForTokens(
313 uint amountIn,
314 uint amountOutMin,
315 address[] calldata path,
316 address to,
317 uint deadline
318 ) external returns (uint[] memory amounts);
319 function swapTokensForExactTokens(
320 uint amountOut,
321 uint amountInMax,
322 address[] calldata path,
323 address to,
324 uint deadline
325 ) external returns (uint[] memory amounts);
326 function swapExactETHForTokens(uint amountOutMin, address[] calldata path, address to, uint deadline)
327 external
328 payable
329 returns (uint[] memory amounts);
330 function swapTokensForExactETH(uint amountOut, uint amountInMax, address[] calldata path, address to, uint deadline)
331 external
332 returns (uint[] memory amounts);
333 function swapExactTokensForETH(uint amountIn, uint amountOutMin, address[] calldata path, address to, uint deadline)
334 external
335 returns (uint[] memory amounts);
336 function swapETHForExactTokens(uint amountOut, address[] calldata path, address to, uint deadline)
337 external
338 payable

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339 returns (uint[] memory amounts);
340
341 function quote(uint amountA, uint reserveA, uint reserveB) external pure returns (uint amountB);
342 function getAmountOut(uint amountIn, uint reserveIn, uint reserveOut) external pure returns (uint amountOut);
343 function getAmountIn(uint amountOut, uint reserveIn, uint reserveOut) external pure returns (uint amountIn);
344 function getAmountsOut(uint amountIn, address[] calldata path) external view returns (uint[] memory amounts);
345 function getAmountsIn(uint amountOut, address[] calldata path) external view returns (uint[] memory amounts);
346}
347
348
349
350interface IUniswapV2Router02 is IUniswapV2Router01 {
351 function removeLiquidityETHSupportingFeeOnTransferTokens(
352 address token,
353 uint liquidity,
354 uint amountTokenMin,
355 uint amountETHMin,
356 address to,
357 uint deadline
358 ) external returns (uint amountETH);
359 function removeLiquidityETHWithPermitSupportingFeeOnTransferTokens(
360 address token,
361 uint liquidity,
362 uint amountTokenMin,
363 uint amountETHMin,
364 address to,
365 uint deadline,
366 bool approveMax, uint8 v, bytes32 r, bytes32 s
367 ) external returns (uint amountETH);
368
369 function swapExactTokensForTokensSupportingFeeOnTransferTokens(
370 uint amountIn,
371 uint amountOutMin,
372 address[] calldata path,
373 address to,
374 uint deadline
375 ) external;
376 function swapExactETHForTokensSupportingFeeOnTransferTokens(
377 uint amountOutMin,
378 address[] calldata path,
379 address to,
380 uint deadline
381 ) external payable;
382 function swapExactTokensForETHSupportingFeeOnTransferTokens(
383 uint amountIn,
384 uint amountOutMin,
385 address[] calldata path,
386 address to,
387 uint deadline
388 ) external;
389}
390
391
392contract TrustRise is Context, IBEP20, Ownable {
393 using SafeMath for uint256;
394 using Address for address;
395
396 mapping (address => uint256) private _rOwned;
397 mapping (address => uint256) private _tOwned;
398 mapping (address => mapping (address => uint256)) private _allowances;
399 mapping (address => bool) private _AutomaticMarketMaker;
400 mapping (address => bool) private _isExcludedFromFee;
401 address public CharityWallet =;
402 mapping (address => bool) private _isExcluded;
403 address[] private _excluded;
404
405 uint256 private constant MAX = ~uint256(0);
406 uint256 private _tTotal = 125 *10**8 * 10**18;
407 uint256 private _rTotal = (MAX - (MAX % _tTotal));
408 uint256 private _tFeeTotal;
409
410 string private _name = "TrustRise";
411 string private _symbol = "TRISE";
412 uint8 private _decimals = 18;
413
414 uint256 private _taxFee = 2;
415 uint256 private _previousTaxFee = _taxFee;
416
417 uint256 private _liquidityFee = 2;
418 uint256 private _previousLiquidityFee = _liquidityFee;
419
420 uint256 private _CharityFee = 2;
421 uint256 private _previousCharityFee = _CharityFee;
422
423
424 uint256 public buyTaxFee = _taxFee;
425 uint256 public buyLiquidityFee = _liquidityFee;
426 uint256 public buyCharityFee = _CharityFee;
427
428
429 uint256 public SellTaxFee = 2;
430 uint256 public SellLiquidityFee = 2;
431 uint256 public SellCharityFee = 2;
432
433

```

```

434
435 IUniswapV2Router02 public immutable uniswapV2Router;
436 address public immutable uniswapV2Pair;
437
438 bool inSwapAndLiquify;
439 bool public swapAndLiquifyEnabled = true;
440
441 uint256 public _maxTxAmount = 125 *10**8 * 10**18;
442 uint256 private numTokensSellToAddToLiquidity = 25 *10**8 * 10**18;
443
444 event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
445 event SwapAndLiquifyEnabledUpdated(bool enabled);
446 event SwapAndLiquify(
447     uint256 tokensSwapped,
448     uint256 ethReceived,
449     uint256 tokensIntoLiquidity
450 );
451
452 modifier lockTheSwap {
453     inSwapAndLiquify = true;
454     _;
455     inSwapAndLiquify = false;
456 }
457
458 constructor () {
459     _rOwned[_msgSender()] = _rTotal;
460     IUniswapV2Router02 _uniswapV2Router = IUniswapV2Router02();
461
462     uniswapV2Pair = IUniswapV2Factory(_uniswapV2Router.factory())
463         .createPair(address(this), _uniswapV2Router.WETH());
464
465     uniswapV2Router = _uniswapV2Router;
466
467     _isExcludedFromFee[owner()] = true;
468     _isExcludedFromFee[address(this)] = true;
469     _isExcludedFromFee[CharityWallet] = true;
470     AutomaticMarketMaker[uniswapV2Pair] = true;
471     emit Transfer(address(0), _msgSender(), _tTotal);
472 }
473
474 function name() public view returns (string memory) {
475     return _name;
476 }
477
478 function symbol() public view returns (string memory) {
479     return _symbol;
480 }
481
482 function decimals() public view returns (uint8) {
483     return _decimals;
484 }
485
486 function totalSupply() public view override returns (uint256) {
487     return _tTotal;
488 }
489
490 function balanceOf(address account) public view override returns (uint256) {
491     if (_isExcluded[account]) return _tOwned[account];
492     return tokenFromReflection(_rOwned[account]);
493 }
494
495 function transfer(address recipient, uint256 amount) public override returns (bool) {
496     _transfer(_msgSender(), recipient, amount);
497     return true;
498 }
499
500 function allowance(address owner, address spender) public view override returns (uint256) {
501     return _allowances[owner][spender];
502 }
503
504 function approve(address spender, uint256 amount) public override returns (bool) {
505     _approve(_msgSender(), spender, amount);
506     return true;
507 }
508
509 function transferFrom(address sender, address recipient, uint256 amount) public override returns (bool) {
510     _transfer(sender, recipient, amount);
511     _approve(sender, _msgSender(), _allowances[sender][_msgSender()].sub(amount, "BEP20: transfer amount exceeds allowance"));
512     return true;
513 }
514
515 function increaseAllowance(address spender, uint256 addedValue) public virtual returns (bool) {
516     _approve(_msgSender(), spender, _allowances[_msgSender()][spender].add(addedValue));
517     return true;
518 }
519
520 function decreaseAllowance(address spender, uint256 subtractedValue) public virtual returns (bool) {
521     _approve(_msgSender(), spender, _allowances[_msgSender()][spender].sub(subtractedValue, "BEP20: decreased allowance below zero"));
522     return true;
523 }
524
525 function isExcludedFromReward(address account) public view returns (bool) {
526     return _isExcluded[account];
527 }

```

```

528
529 function totalFees() public view returns (uint256) {
530 return _tFeeTotal;
531 }
532 function setAutomaticMarketMaker(address _autoMM, bool _status) external onlyOwner(){
533 AutomaticMarketMaker[_autoMM] = _status;
534 }
535 function _isAutomaticMarketMaker(address AMM) public view returns (bool){
536 return AutomaticMarketMaker[AMM];
537 }
538 function deliver(uint256 tAmount) public {
539 address sender = _msgSender();
540 require(!_isExcluded[sender], "Excluded addresses cannot call this function");
541 (uint256 rAmount,,,,) = _getValues(tAmount);
542 _rOwned[sender] = _rOwned[sender].sub(rAmount);
543 _rTotal = _rTotal.sub(rAmount);
544 _tFeeTotal = _tFeeTotal.add(tAmount);
545 }
546
547 function reflectionFromToken(uint256 tAmount, bool deductTransferFee) public view returns (uint256) {
548 require(tAmount <= _tTotal, "Amount must be less than supply");
549 if (!deductTransferFee) {
550 (uint256 rAmount,,,,) = _getValues(tAmount);
551 return rAmount;
552 } else {
553 (uint256 rTransferAmount,,,,) = _getValues(tAmount);
554 return rTransferAmount;
555 }
556 }
557
558 function tokenFromReflection(uint256 rAmount) public view returns (uint256) {
559 require(rAmount <= _rTotal, "Amount must be less than total reflections");
560 uint256 currentRate = _getRate();
561 return rAmount.div(currentRate);
562 }
563
564 function excludeFromReward(address account) public onlyOwner() {
565 require(account !=, "We can not exclude Pancake router.");
566 require(!_isExcluded[account], "Account is already excluded");
567 if (_rOwned[account] > 0) {
568 _tOwned[account] = tokenFromReflection(_rOwned[account]);
569 }
570 _isExcluded[account] = true;
571 _excluded.push(account);
572 }
573
574 function includeInReward(address account) external onlyOwner() {
575 require(_isExcluded[account], "Account is already excluded");
576 for (uint256 i = 0; i < _excluded.length; i++) {
577 if (_excluded[i] == account) {
578 _excluded[i] = _excluded[_excluded.length - 1];
579 _tOwned[account] = 0;
580 _isExcluded[account] = false;
581 _excluded.pop();
582 break;
583 }
584 }
585 }
586 function excludeFromFee(address account) public onlyOwner {
587 _isExcludedFromFee[account] = true;
588 }
589
590 function includeInFee(address account) public onlyOwner {
591 _isExcludedFromFee[account] = false;
592 }
593
594 function setCharityWallet(address newWallet) external onlyOwner() {
595 CharityWallet = newWallet;
596 _isExcludedFromFee[CharityWallet] = true;
597 }
598 function setMaxTxAmount(uint256 maxTxAmount) external onlyOwner(){
599 _maxTxAmount = maxTxAmount * 10e18;
600 }
601
602 function setSwapAndLiquifyEnabled(bool _enabled) public onlyOwner {
603 swapAndLiquifyEnabled = _enabled;
604 emit SwapAndLiquifyEnabledUpdated(_enabled);
605 }
606 function _transferBothExcluded(address sender, address recipient, uint256 tAmount) private {
607 (uint256 rAmount, uint256 rTransferAmount, uint256 rFee, uint256 tTransferAmount, uint256 tFee, uint256 tLiquidity) = _getValues(tAmount);
608 _tOwned[sender] = _tOwned[sender].sub(tAmount);
609 _rOwned[sender] = _rOwned[sender].sub(rAmount);
610 _tOwned[recipient] = _tOwned[recipient].add(tTransferAmount);
611 _rOwned[recipient] = _rOwned[recipient].add(rTransferAmount);
612 _takeLiquidity(tLiquidity);
613 _reflectFee(rFee, tFee);
614 emit Transfer(sender, recipient, tTransferAmount);
615 }
616
617
618
619 receive() external payable {}
620
621 function _reflectFee(uint256 rFee, uint256 tFee) private {

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```

622 _rTotal = _rTotal.sub(rFee);
623 _tFeeTotal = _tFeeTotal.add(tFee);
624 }
625
626 function _getValues(uint256 tAmount) private view returns (uint256, uint256, uint256, uint256, uint256, uint256) {
627 (uint256 tTransferAmount, uint256 tFee, uint256 tLiquidity) = _getTValues(tAmount);
628 (uint256 rAmount, uint256 rTransferAmount, uint256 rFee) = _getRValues(tAmount, tFee, tLiquidity, _getRate());
629 return (rAmount, rTransferAmount, rFee, tTransferAmount, tFee, tLiquidity);
630 }
631
632 function _getTValues(uint256 tAmount) private view returns (uint256, uint256, uint256) {
633 uint256 tFee = calculateTaxFee(tAmount);
634 uint256 tLiquidity = calculateLiquidityFee(tAmount);
635 uint256 tTransferAmount = tAmount.sub(tFee).sub(tLiquidity);
636 return (tTransferAmount, tFee, tLiquidity);
637 }
638
639 function _getRValues(uint256 tAmount, uint256 tFee, uint256 tLiquidity, uint256 currentRate) private pure returns (uint256, u
int256, uint256) {
640 uint256 rAmount = tAmount.mul(currentRate);
641 uint256 rFee = tFee.mul(currentRate);
642 uint256 rLiquidity = tLiquidity.mul(currentRate);
643 uint256 rTransferAmount = rAmount.sub(rFee).sub(rLiquidity);
644 return (rAmount, rTransferAmount, rFee);
645 }
646
647 function _getRate() private view returns(uint256) {
648 (uint256 rSupply, uint256 tSupply) = _getCurrentSupply();
649 return rSupply.div(tSupply);
650 }
651
652 function _getCurrentSupply() private view returns(uint256, uint256) {
653 uint256 rSupply = _rTotal;
654 uint256 tSupply = _tTotal;
655 for (uint256 i = 0; i < _excluded.length; i++) {
656 if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return (_rTotal, _tTotal);
657 rSupply = rSupply.sub(_rOwned[_excluded[i]]);
658 tSupply = tSupply.sub(_tOwned[_excluded[i]]);
659 }
660 if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
661 return (rSupply, tSupply);
662 }
663
664 function _takeLiquidity(uint256 tLiquidity) private {
665 uint256 currentRate = _getRate();
666 uint256 rLiquidity = tLiquidity.mul(currentRate);
667 _rOwned[address(this)] = _rOwned[address(this)].add(rLiquidity);
668 if(!_isExcluded[address(this)])
669 _tOwned[address(this)] = _tOwned[address(this)].add(tLiquidity);
670 }
671
672 function calculateTaxFee(uint256 _amount) private view returns (uint256) {
673 return _amount.mul(_taxFee).div(
674 10**2
675 );
676 }
677
678 function calculateLiquidityFee(uint256 _amount) private view returns (uint256) {
679 return _amount.mul(_liquidityFee).div(
680 10**2
681 );
682 }
683
684 function removeAllFee() private {
685 if(_taxFee == 0 && _liquidityFee == 0) return;
686
687 _previousTaxFee = _taxFee;
688 _previousCharityFee = _CharityFee;
689 _previousLiquidityFee = _liquidityFee;
690
691 _taxFee = 0;
692 _CharityFee = 0;
693 _liquidityFee = 0;
694
695 }
696
697 function restoreAllFee() private {
698 _taxFee = _previousTaxFee;
699 _CharityFee = _previousCharityFee;
700 _liquidityFee = _previousLiquidityFee;
701
702 }
703 function setbuyTaxFees(uint256 taxFee,uint256 CharityFee,uint256 liquidityFee)external onlyOwner(){
704 buyTaxFee = taxFee;
705 buyCharityFee = CharityFee;
706 buyLiquidityFee = liquidityFee;
707
708 _taxFee = taxFee;
709 _liquidityFee = liquidityFee;
710 _CharityFee = CharityFee;
711
712 _previousLiquidityFee = _liquidityFee;
713 _previousCharityFee = _CharityFee;
714 _previousTaxFee = _taxFee;
715

```



```

716 }
717 function setSellTaxFees(uint256 taxFee,uint256 CharityFee,uint256 liquidityFee)external onlyOwner(){
718 SellTaxFee = taxFee;
719 SellCharityFee = CharityFee;
720 SellLiquidityFee = liquidityFee;
721
722 }
723 function isExcludedFromFee(address account) public view returns(bool) {
724 return _isExcludedFromFee[account];
725 }
726
727 function _approve(address owner, address spender, uint256 amount) private {
728 require(owner != address(0), "BEP20: approve from the zero address");
729 require(spender != address(0), "BEP20: approve to the zero address");
730
731 _allowances[owner][spender] = amount;
732 emit Approval(owner, spender, amount);
733 }
734
735 function _transfer(
736 address from,
737 address to,
738 uint256 amount
739 ) private {
740 require(from != address(0), "BEP20: transfer from the zero address");
741 require(to != address(0), "BEP20: transfer to the zero address");
742 require(amount > 0, "Transfer amount must be greater than zero");
743
744 uint256 contractTokenBalance = balanceOf(address(this));
745 bool overMinTokenBalance = contractTokenBalance >= numTokensSellToAddToLiquidity;
746 if (
747 overMinTokenBalance &&
748 !inSwapAndLiquify &&
749 from != uniswapV2Pair &&
750 swapAndLiquifyEnabled
751 ) {
752 contractTokenBalance = numTokensSellToAddToLiquidity;
753 swapAndLiquify(contractTokenBalance);
754 }
755
756 _tokenTransfer(from,to,amount);
757 }
758
759 function swapAndLiquify(uint256 contractTokenBalance) private lockTheSwap {
760 uint256 half = contractTokenBalance.div(2);
761 uint256 otherHalf = contractTokenBalance.sub(half);
762
763 uint256 initialBalance = address(this).balance;
764
765 swapTokensForEth(half);
766
767 uint256 newBalance = address(this).balance.sub(initialBalance);
768
769 addLiquidity(otherHalf, newBalance);
770
771 emit SwapAndLiquify(half, newBalance, otherHalf);
772 }
773
774 function swapTokensForEth(uint256 tokenAmount) private {
775 address[] memory path = new address[](2);
776 path[0] = address(this);
777 path[1] = uniswapV2Router.WETH();
778
779 _approve(address(this), address(uniswapV2Router), tokenAmount);
780
781 uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
782 tokenAmount,
783 0,
784 path,
785 address(this),
786 block.timestamp
787 );
788 }
789
790 function addLiquidity(uint256 tokenAmount, uint256 ethAmount) private {
791 _approve(address(this), address(uniswapV2Router), tokenAmount);
792
793 uniswapV2Router.addLiquidityETH{value: ethAmount}(
794 address(this),
795 tokenAmount,
796 0,
797 0,
798 owner(),
799 block.timestamp
800 );
801 }
802
803 function _tokenTransfer(address sender, address recipient, uint256 amount) private {
804 if(!_isExcludedFromFee[sender] || !_isExcludedFromFee[recipient]){
805 removeAllFee();
806 }else{
807 if(AutomaticMarketMaker[recipient] || recipient == uniswapV2Pair){
808 _taxFee = SellTaxFee;
809 _liquidityFee = SellLiquidityFee;
810 _CharityFee = SellCharityFee;

```

```

811
812 }else{
813 _taxFee = buyTaxFee;
814 _liquidityFee = buyLiquidityFee;
815 _CharityFee = buyCharityFee;
816 }
817 }
818
819
820 uint256 CharityAmt = amount.mul(_CharityFee).div(100);
821
822
823 if (_isExcluded[sender] && !_isExcluded[recipient]) {
824 _transferFromExcluded(sender, recipient, (amount.sub(CharityAmt)));
825 } else if (!_isExcluded[sender] && _isExcluded[recipient]) {
826 _transferToExcluded(sender, recipient, (amount.sub(CharityAmt)));
827 } else if (!_isExcluded[sender] && !_isExcluded[recipient]) {
828 _transferStandard(sender, recipient, (amount.sub(CharityAmt)));
829 } else if (_isExcluded[sender] && _isExcluded[recipient]) {
830 _transferBothExcluded(sender, recipient, (amount.sub(CharityAmt)));
831 } else {
832 _transferStandard(sender, recipient, (amount.sub(CharityAmt)));
833 }
834
835 _taxFee = 0;
836 _liquidityFee = 0;
837
838 _transferStandard(sender, CharityWallet, CharityAmt);
839
840 _taxFee = _previousTaxFee;
841 _liquidityFee = _previousLiquidityFee;
842
843
844 if(!_isExcludedFromFee[sender] || !_isExcludedFromFee[recipient] || AutomaticMarketMaker[recipient])
845 restoreAllFee();
846
847 }
848
849 function _transferStandard(address sender, address recipient, uint256 tAmount) private {
850 (uint256 rAmount, uint256 rTransferAmount, uint256 rFee, uint256 tTransferAmount, uint256 tFee, uint256 tLiquidity) = _getVal
ues(tAmount);
851 _rOwned[sender] = _rOwned[sender].sub(rAmount);
852 _rOwned[recipient] = _rOwned[recipient].add(rTransferAmount);
853 _takeLiquidity(tLiquidity);
854 _reflectFee(rFee, tFee);
855 emit Transfer(sender, recipient, tTransferAmount);
856 }
857
858 function _transferToExcluded(address sender, address recipient, uint256 tAmount) private {
859 (uint256 rAmount, uint256 rTransferAmount, uint256 rFee, uint256 tTransferAmount, uint256 tFee, uint256 tLiquidity) = _getVal
ues(tAmount);
860 _rOwned[sender] = _rOwned[sender].sub(rAmount);
861 _tOwned[recipient] = _tOwned[recipient].add(tTransferAmount);
862 _rOwned[recipient] = _rOwned[recipient].add(rTransferAmount);
863 _takeLiquidity(tLiquidity);
864 _reflectFee(rFee, tFee);
865 emit Transfer(sender, recipient, tTransferAmount);
866 }
867
868 function _transferFromExcluded(address sender, address recipient, uint256 tAmount) private {
869 (uint256 rAmount, uint256 rTransferAmount, uint256 rFee, uint256 tTransferAmount, uint256 tFee, uint256 tLiquidity) = _getVal
ues(tAmount);
870 _tOwned[sender] = _tOwned[sender].sub(tAmount);
871 _rOwned[sender] = _rOwned[sender].sub(rAmount);
872 _rOwned[recipient] = _rOwned[recipient].add(rTransferAmount);
873 _takeLiquidity(tLiquidity);
874 _reflectFee(rFee, tFee);
875 emit Transfer(sender, recipient, tTransferAmount);
876 }
877}

```