```
{
  "compiler": {
     "version": "0.8.25+commit.b61c2a91"
  },
  "language": "Solidity",
  "output": {
     "abi": [
       {
          "inputs": [],
          "stateMutability": "nonpayable",
          "type": "constructor"
       },
       {
          "anonymous": false,
          "inputs": [
             {
                "indexed": true,
                "internalType": "address",
                "name": "participant",
                "type": "address"
             },
             {
                "indexed": false,
                "internalType": "uint256",
                "name": "newMainnetBalance",
```

[

```
"type": "uint256"
     },
     {
        "indexed": false,
        "internalType": "uint256",
        "name": "newTestnetBalance",
        "type": "uint256"
     }
  ],
  "name": "LedgerUpdated",
  "type": "event"
},
{
  "anonymous": false,
  "inputs": [
     {
        "indexed": true,
        "internalType": "address",
        "name": "participant",
        "type": "address"
     },
     {
        "indexed": false,
        "internalType": "uint256",
        "name": "mainnetAmount",
        "type": "uint256"
```

```
},
     {
       "indexed": false,
       "internalType": "uint256",
       "name": "testnetAmount",
       "type": "uint256"
    }
  ],
  "name": "TransactionLogged",
  "type": "event"
},
{
  "inputs": [
     {
       "internalType": "address",
       "name": "participant",
       "type": "address"
     }
  ],
  "name": "getLedger",
  "outputs": [
     {
       "components": [
          {
             "internalType": "uint256",
             "name": "mainnetBalance",
```

```
"type": "uint256"
          },
          {
             "internalType": "uint256",
             "name": "testnetBalance",
             "type": "uint256"
          }
       ],
        "internalType": "struct LiminalFinancialSystem.Ledger",
        "name": "",
        "type": "tuple"
     }
  ],
  "stateMutability": "view",
  "type": "function"
},
{
  "inputs": [],
  "name": "getTotalTransactions",
  "outputs": [
     {
        "internalType": "uint256",
        "name": "",
        "type": "uint256"
     }
  ],
```

```
"stateMutability": "view",
  "type": "function"
},
{
  "inputs": [
     {
        "internalType": "address",
        "name": "",
        "type": "address"
     }
  ],
  "name": "ledgers",
  "outputs": [
     {
        "internalType": "uint256",
        "name": "mainnetBalance",
        "type": "uint256"
     },
     {
        "internalType": "uint256",
        "name": "testnetBalance",
        "type": "uint256"
     }
  ],
  "stateMutability": "view",
  "type": "function"
```

```
},
{
  "inputs": [
     {
        "internalType": "address",
        "name": "participant",
        "type": "address"
     },
     {
        "internalType": "uint256",
        "name": "amount",
        "type": "uint256"
     }
  ],
  "name": "performTransaction",
  "outputs": [],
  "stateMutability": "nonpayable",
  "type": "function"
},
{
  "inputs": [
     {
        "internalType": "uint256",
        "name": "",
        "type": "uint256"
     }
```

```
],
     "name": "transactions",
     "outputs": [
       {
          "internalType": "address",
          "name": "participant",
          "type": "address"
       },
       {
          "internalType": "uint256",
          "name": "mainnetAmount",
          "type": "uint256"
       },
       {
          "internalType": "uint256",
          "name": "testnetAmount",
          "type": "uint256"
       }
    ],
     "stateMutability": "view",
     "type": "function"
  }
"devdoc": {
  "author": "James Ocallaghan",
   "details": "The system showcases credit/debit balance management across mainnet and
```

],

```
testnet ledgers. Visit ENS: citibankdemobusiness.dev for details.",
          "kind": "dev",
          "methods": {
             "constructor": {
                "details": "Initialize with a transaction"
             },
             "getLedger(address)": {
                "details": "Getter function for a participant's ledger balances.",
                "params": {
                  "participant": "The address of the participant."
               },
                "returns": {
                  "_0": "Ledger memory The ledger of the participant."
               }
             },
             "getTotalTransactions()": {
               "details": "Getter function for total transactions (for demonstration).",
               "returns": {
                  " 0": "uint256 The total number of transactions."
               }
             },
             "performTransaction(address,uint256)": {
                    "details": "Perform a transaction, debiting the mainnet balance and crediting the
testnet balance.",
                "params": {
                  "amount": "The amount to transfer between ledgers.",
```

```
"participant": "The address of the participant performing the transaction."
               }
             }
          },
          "title": "Liminal Financial Transaction System",
          "version": 1
       },
        "userdoc": {
          "kind": "user",
          "methods": {},
           "notice": "This contract demonstrates a dual-ledger transaction system for Citibank Demo
Business Inc.",
          "version": 1
       }
     },
     "settings": {
       "compilationTarget": {
          "Mainnet2testnet.sol": "LiminalFinancialSystem"
       },
        "evmVersion": "cancun",
        "libraries": {},
        "metadata": {
          "bytecodeHash": "ipfs"
       },
        "optimizer": {
          "enabled": false,
```

```
"runs": 200
      },
      "remappings": []
    },
    "sources": {
       "Mainnet2testnet.sol": {
                                                                                  "keccak256":
"0x2207e8ba1e0d45373fb350d5b7ca0a1463460ee4cd2e597964591d629c69770e",
         "license": "MIT",
         "urls": [
"bzz-raw://c28d29e92769f56201ee0ba954d41e5f47a6d94751438a65be312d6cf8ad0023",
           "dweb:/ipfs/QmTLRchQdn8RnmWHS37wJub3eq1P6ANrPA96P8LP3CzpfJ"
         ]
      }
    },
    "version": 1
  },
  {
    "deploy": {
      "VM:-": {
         "linkReferences": {},
         "autoDeployLib": true
      },
       "main:1": {
         "linkReferences": {},
```

```
"autoDeployLib": true
  },
  "ropsten:3": {
     "linkReferences": {},
     "autoDeployLib": true
  },
  "rinkeby:4": {
     "linkReferences": {},
     "autoDeployLib": true
  },
  "kovan:42": {
     "linkReferences": {},
     "autoDeployLib": true
  },
  "goerli:5": {
     "linkReferences": {},
     "autoDeployLib": true
  },
  "Custom": {
     "linkReferences": {},
     "autoDeployLib": true
  }
},
"data": {
  "bytecode": {
     "functionDebugData": {
```

```
"@_60": {
    "entryPoint": null,
    "id": 60,
    "parameterSlots": 0,
    "returnSlots": 0
  }
},
"generatedSources": [],
"linkReferences": {},
```

"object":

a75f395ff3fe608060405234801561000f575f80fd5b5060043610610055575f3560e01c806367844d2 b146100595780639ace38c214610075578063b1e1c370146100a7578063b5c604ff146100d8578063 f7cd6af9146100f6575b5f80fd5b610073600480360381019061006e91906105b5565b610126565b00 5b61008f600480360381019061008a91906105f3565b610424565b60405161009e9392919061063c 565b60405180910390f35b6100c160048036038101906100bc9190610671565b610478565b604051 6100cf92919061069c565b60405180910390f35b6100e0610497565b6040516100ed91906106c3565 b60405180910390f35b610110600480360381019061010b9190610671565b6104a3565b604051610 fffffffffffffff1681526020019081526020015f205f015410156101a7576040517f08c379a0000000000

16815260200183815260200183815250908060018154018082558091505060019003905f5260205f 206001015460405161041892919061069c565b60405180910390a25050565b60018181548110610 433575f80fd5b905f5260205f2090600302015f91509050805f015f9054906101000a900473ffffffffffff 05f0154908060010154905082565b5f600180549050905090565b6104ab61050c565b5f808373ffffffff 0160405290815f82015481526020016001820154815250509050919050565b604051806040016040 61055182610528565b9050919050565b61056181610547565b811461056b575f80fd5b50565b5f813 5905061057c81610558565b92915050565b5f819050919050565b61059481610582565b811461059 e575f80fd5b50565b5f813590506105af8161058b565b92915050565b5f80604083850312156105cb5 76105ca610524565b5b5f6105d88582860161056e565b92505060206105e9858286016105a1565b9 150509250929050565b5f6020828403121561060857610607610524565b5b5f61061584828501610 5a1565b91505092915050565b61062781610547565b82525050565b61063681610582565b825250 50565b5f60608201905061064f5f83018661061e565b61065c602083018561062d565b61066960408 3018461062d565b949350505050565b5f6020828403121561068657610685610524565b5b5f61069 38482850161056e565b91505092915050565b5f6040820190506106af5f83018561062d565b6106bc 602083018461062d565b9392505050565b5f6020820190506106d65f83018461062d565b92915050

opcodes": "PUSH1 0x80 PUSH1 0x40 MSTORE CALLVALUE DUP1 ISZERO PUSH1" 0xE JUMPI PUSH0 DUP1 REVERT JUMPDEST POP PUSH2 0x3E8 PUSH0 DUP1 CALLER PUSH₂₀ **AND** PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD DUP2 SWAP1 **SSTORE** POP PUSH2 PUSH0 DUP1 CALLER 0x1F4 PUSH20 AND PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD DUP2 SWAP1 SSTORE POP PUSH2 0x872 DUP1 PUSH2 0xA7 PUSH0 CODECOPY PUSH0 RETURN INVALID PUSH1 0x80 PUSH1 0x40 MSTORE CALLVALUE DUP1 ISZERO PUSH2 0xF JUMPI PUSH0 DUP1 REVERT JUMPDEST POP PUSH1 0x4 CALLDATASIZE LT PUSH2 0x55 JUMPI PUSH0 CALLDATALOAD PUSH1 0xE0 SHR DUP1 PUSH4 0x67844D2B EQ PUSH2 0x59 JUMPI DUP1 PUSH4 0x9ACE38C2 EQ PUSH2 0x75 JUMPI DUP1 PUSH4 0xB1E1C370 EQ PUSH2 0xA7 JUMPI DUP1 PUSH4 0xB5C604FF EQ PUSH2 0xD8 JUMPI DUP1 PUSH4 0xF7CD6AF9 EQ

PUSH2 0xF6 JUMPI JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH2 0x73 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x6E SWAP2 SWAP1 PUSH2 0x5B5 JUMP JUMPDEST PUSH2 0x126 JUMP JUMPDEST STOP JUMPDEST PUSH2 0x8F PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x8A SWAP2 SWAP1 PUSH2 0x5F3 JUMP JUMPDEST PUSH2 0x424 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x9E SWAP4 SWAP3 SWAP2 SWAP1 PUSH2 0x63C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xC1 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0xBC SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x478 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xCF SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xE0 PUSH2 0x497 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xED SWAP2 SWAP1 PUSH2 0x6C3 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0x110 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x10B SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x4A3 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x11D SWAP2 SWAP1 PUSH2 0x718 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST DUP1 0x20 ADD SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD SLOAD LT ISZERO PUSH2 0x1A7 JUMPI PUSH1 0x40 MLOAD PUSH32 PUSH1 0x4 ADD PUSH2 0x19E SWAP1 PUSH2 0x78B JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 REVERT JUMPDEST DUP1 PUSH0 DUP1 DUP5 PUSH20 AND PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x1F4 SWAP2 SWAP1 PUSH2 0x7D6 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP DUP1 PUSH0 DUP1 DUP5 PUSH₂₀ AND PUSH20 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x249 SWAP2 SWAP1 PUSH2 0x809 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP PUSH1 0x1 PUSH1 0x40 MLOAD DUP1 PUSH1 0x60 ADD PUSH1 AND DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE POP SWAP1 DUP1 PUSH1 0x1 DUP2 SLOAD ADD DUP1 DUP3 SSTORE DUP1 SWAP2 POP POP PUSH1 0x1 SWAP1 SUB SWAP1 PUSH0 MSTORE PUSH1 0x20 PUSH0 KECCAK256 SWAP1 PUSH1 0x3 MUL ADD PUSH0 SWAP1 SWAP2 SWAP1 SWAP2 SWAP1 SWAP2 POP PUSH0 DUP3 ADD MLOAD DUP2 PUSH0 ADD PUSH0 PUSH2 0x100 EXP DUP2 SWAP1 SSTORE POP PUSH1 0x20 DUP3 ADD MLOAD DUP2 PUSH1 0x1 ADD SSTORE PUSH1 0x40 DUP3 ADD MLOAD DUP2 PUSH1 0x2 ADD SSTORE POP POP DUP2 PUSH20 AND PUSH32 0x7772D368CD3CC6FA8DC9C0956D36DD1243D603ABC8D99496F89D0E6950D80DDE DUP3 DUP4 PUSH1 0x40 MLOAD PUSH2 0x34B SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 LOG2 DUP2 PUSH20 AND PUSH32 0xE3E2E5B15DBD2776222DEAB4CBD7FB2AEEECFD735EED24E9809B2352F3FA2D37 PUSH0 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD SLOAD PUSH0 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD SLOAD PUSH1 0x40 MLOAD PUSH2 0x418 SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 LOG2 POP POP JUMP JUMPDEST PUSH1 0x1 DUP2 DUP2 SLOAD DUP2 LT PUSH2 0x433 JUMPI PUSH0 DUP1 REVERT JUMPDEST SWAP1 PUSH0 MSTORE PUSH1 0x20 PUSH0 KECCAK256 SWAP1 PUSH1 0x3 MUL ADD PUSH0 SWAP2 POP SWAP1 POP DUP1 PUSH0 ADD PUSH0 SWAP1 SLOAD SWAP1 PUSH2 0x100 DUP1 PUSH1 0x1 ADD SLOAD SWAP1 DUP1 PUSH1 0x2 ADD SLOAD SWAP1 POP DUP4 JUMP JUMPDEST PUSH0 PUSH1 0x20 MSTORE DUP1 PUSH0 MSTORE PUSH1 0x40 PUSH0 KECCAK256 PUSH0 SWAP2 POP SWAP1 POP DUP1 PUSH0 ADD SLOAD SWAP1 DUP1 PUSH1 0x1 ADD SLOAD SWAP1 POP DUP3 JUMP JUMPDEST PUSH0 PUSH1 0x1 DUP1 SLOAD SWAP1 POP SWAP1 POP SWAP1 JUMP JUMPDEST PUSH2 0x4AB PUSH2 0x50C **JUMPDEST** JUMP PUSH₀ DUP1 DUP4 PUSH20 AND PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE SWAP1 DUP2 PUSH0 DUP3 ADD SLOAD DUP2 MSTORE PUSH1 0x20 ADD PUSH1 0x1 DUP3 ADD SLOAD DUP2 MSTORE POP POP SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE DUP1 PUSH0 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 DUP2 MSTORE POP SWAP1 JUMP JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH0 PUSH20 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH2 0x551 DUP3 PUSH2 0x528 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x561 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP2 EQ PUSH2 0x56B JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSH0 DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x57C DUP2 PUSH2 0x558 JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP2 SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x594 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP2 EQ PUSH2 0x59E JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSH0 DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x5AF DUP2 PUSH2 0x58B JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP1 PUSH1 0x40 DUP4 DUP6 SUB SLT ISZERO PUSH2 0x5CB JUMPI PUSH2 0x5CA PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSHO PUSH2 0x5D8 DUP6 DUP3 DUP7 ADD PUSH2 0x56E JUMP JUMPDEST SWAP3 POP POP PUSH1 0x20 PUSH2 0x5E9 DUP6 DUP3 DUP7 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 POP SWAP3 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x608 JUMPI PUSH2 0x607 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x615 DUP5 DUP3 DUP6 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x627 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH2 0x636 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH0 PUSH1 0x60 DUP3 ADD SWAP1 POP PUSH2 0x64F PUSH0 DUP4 ADD DUP7 PUSH2 0x61E JUMP JUMPDEST PUSH2 0x65C PUSH1 0x20 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x669 PUSH1 0x40 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP5 SWAP4 POP POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x686 JUMPI PUSH2 0x685 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x693 DUP5 DUP3 DUP6 ADD PUSH2 0x56E JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x6AF PUSH0 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x6BC PUSH1 0x20 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP4 SWAP3 POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP PUSH2 0x6D6 PUSH0 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x6E5 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH1 0x40 DUP3 ADD PUSH0 DUP3 ADD MLOAD PUSH2 0x6FF PUSH0 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP PUSH1 0x20 DUP3 ADD MLOAD PUSH2 0x712 PUSH1 0x20 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP POP POP JUMP JUMPDEST PUSHO PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x72B PUSH0 DUP4 ADD DUP5 PUSH2 0x6EB JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP3 DUP3 MSTORE PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP3 SWAP2 POP **JUMPDEST** POP JUMP PUSH32 0x496E73756666696369656E74206D61696E6E65742062616C616E63652E000000 PUSH0 DUP3 ADD MSTORE POP JUMP JUMPDEST PUSH0 PUSH2 0x775 PUSH1 0x1D DUP4 PUSH2 0x731 JUMP JUMPDEST SWAP2 POP PUSH2 0x780 DUP3 PUSH2 0x741 JUMP JUMPDEST PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP DUP2 DUP2 SUB PUSH0 DUP4 ADD MSTORE PUSH2 0x7A2 DUP2 PUSH2 0x769 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH32 PUSH₀ MSTORE PUSH1 0x11 PUSH1 0x4 MSTORE PUSH1 0x24 PUSH0 REVERT JUMPDEST PUSH0 PUSH2 0x7E0 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP2 POP PUSH2 0x7EB DUP4 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 SUB SWAP1 POP DUP2 DUP2 GT ISZERO PUSH2 0x803 JUMPI PUSH2 0x802 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH2 0x813 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP2 POP PUSH2 0x81E DUP4 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 ADD SWAP1 POP DUP1 DUP3 GT ISZERO PUSH2 0x836 JUMPI PUSH2 0x835 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP INVALID LOG2 PUSH5 0x6970667358 0x22 SLT KECCAK256 EXP GAS 0xF DUP4 DUP14 EQ 0xAB DUP3 PUSH28 0xD80C3BE88FE223705850E5E032F9B180CC58570FA631ED64736F6C63 NUMBER

```
"393:2830:0:-:0;;;1456:269;;;;;;;1608:4;1571:7;:19;1579:10;1571:19;;;;;;;;;;34;;;41;;;;1687:3;165
0:7;:19;1658:10;1650:19;;;;;;;;34;;:40;;;393:2830;;;;;"
       },
       "deployedBytecode": {
          "functionDebugData": {
            "@getLedger_135": {
               "entryPoint": 1187,
               "id": 135,
               "parameterSlots": 1,
               "returnSlots": 1
            },
            "@getTotalTransactions_145": {
               "entryPoint": 1175,
               "id": 145,
               "parameterSlots": 0,
               "returnSlots": 1
            },
            "@ledgers_19": {
               "entryPoint": 1144,
               "id": 19,
               "parameterSlots": 0,
               "returnSlots": 0
            },
            "@performTransaction_121": {
```

```
"entryPoint": 294,
  "id": 121,
  "parameterSlots": 2,
  "returnSlots": 0
},
"@transactions_23": {
  "entryPoint": 1060,
  "id": 23,
  "parameterSlots": 0,
  "returnSlots": 0
},
"abi_decode_t_address": {
  "entryPoint": 1390,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"abi_decode_t_uint256": {
  "entryPoint": 1441,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"abi_decode_tuple_t_address": {
  "entryPoint": 1649,
  "id": null,
```

```
"returnSlots": 1
            },
            "abi_decode_tuple_t_addresst_uint256": {
               "entryPoint": 1461,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 2
            },
            "abi_decode_tuple_t_uint256": {
               "entryPoint": 1523,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 1
            },
            "abi_encode_t_address_to_t_address_fromStack": {
               "entryPoint": 1566,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 0
            },
"abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45_to_t_string_memory_ptr_fromStack": {
               "entryPoint": 1897,
               "id": null,
```

"parameterSlots": 2,

```
"parameterSlots": 1,
               "returnSlots": 1
            },
"abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack":
{
               "entryPoint": 1771,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 0
            },
            "abi_encode_t_uint256_to_t_uint256": {
               "entryPoint": 1756,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 0
            },
            "abi_encode_t_uint256_to_t_uint256_fromStack": {
               "entryPoint": 1581,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 0
            },
"abi_encode_tuple_t_address_t_uint256_t_uint256__to_t_address_t_uint256_t_uint256__fromStack
_reversed": {
```

```
"entryPoint": 1596,
               "id": null,
               "parameterSlots": 4,
               "returnSlots": 1
            },
"abi_encode_tuple_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc11892297711
67008cf45__to_t_string_memory_ptr__fromStack_reversed": {
               "entryPoint": 1931,
               "id": null,
               "parameterSlots": 1,
               "returnSlots": 1
            },
"abi\_encode\_tuple\_t\_struct\$\_Ledger\_\$7\_memory\_ptr\_\_to\_t\_struct\$\_Ledger\_\$7\_memory\_ptr\_\_fro
mStack_reversed": {
               "entryPoint": 1816,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 1
            },
             "abi_encode_tuple_t_uint256__to_t_uint256__fromStack_reversed": {
               "entryPoint": 1731,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 1
```

```
},
```

```
"abi_encode_tuple_t_uint256_t_uint256__to_t_uint256_t_uint256__fromStack_reversed": {
               "entryPoint": 1692,
               "id": null,
               "parameterSlots": 3,
               "returnSlots": 1
            },
            "allocate_unbounded": {
               "entryPoint": null,
               "id": null,
               "parameterSlots": 0,
               "returnSlots": 1
            },
            "array_storeLengthForEncoding_t_string_memory_ptr_fromStack": {
               "entryPoint": 1841,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 1
            },
            "checked_add_t_uint256": {
               "entryPoint": 2057,
               "id": null,
               "parameterSlots": 2,
               "returnSlots": 1
            },
```

```
"checked_sub_t_uint256": {
  "entryPoint": 2006,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"cleanup_t_address": {
  "entryPoint": 1351,
  "id": null,
  "parameterSlots": 1,
  "returnSlots": 1
},
"cleanup_t_uint160": {
  "entryPoint": 1320,
  "id": null,
  "parameterSlots": 1,
  "returnSlots": 1
},
"cleanup_t_uint256": {
  "entryPoint": 1410,
  "id": null,
  "parameterSlots": 1,
  "returnSlots": 1
},
"panic_error_0x11": {
  "entryPoint": 1961,
```

```
"id": null,
            "parameterSlots": 0,
            "returnSlots": 0
          },
"entryPoint": null,
            "id": null,
            "parameterSlots": 0,
            "returnSlots": 0
          },
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b": {
            "entryPoint": 1316,
            "id": null,
            "parameterSlots": 0,
            "returnSlots": 0
          },
"store\_literal\_in\_memory\_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
45": {
            "entryPoint": 1857,
            "id": null,
            "parameterSlots": 1,
            "returnSlots": 0
          },
```

```
"validator_revert_t_address": {
     "entryPoint": 1368,
     "id": null,
     "parameterSlots": 1,
     "returnSlots": 0
  },
  "validator_revert_t_uint256": {
     "entryPoint": 1419,
     "id": null,
     "parameterSlots": 1,
     "returnSlots": 0
  }
},
"generatedSources": [
  {
     "ast": {
        "nativeSrc": "0:6381:1",
        "nodeType": "YulBlock",
        "src": "0:6381:1",
        "statements": [
          {
             "body": {
                "nativeSrc": "47:35:1",
                "nodeType": "YulBlock",
                "src": "47:35:1",
                "statements": [
```

```
"nativeSrc": "57:19:1",
"nodeType": "YulAssignment",
"src": "57:19:1",
"value": {
  "arguments": [
     {
       "kind": "number",
       "nativeSrc": "73:2:1",
       "nodeType": "YulLiteral",
       "src": "73:2:1",
       "type": "",
       "value": "64"
     }
  ],
  "functionName": {
     "name": "mload",
     "nativeSrc": "67:5:1",
     "nodeType": "Yulldentifier",
     "src": "67:5:1"
  },
  "nativeSrc": "67:9:1",
  "nodeType": "YulFunctionCall",
  "src": "67:9:1"
},
"variableNames": [
```

{

```
"name": "memPtr",
               "nativeSrc": "57:6:1",
               "nodeType": "Yulldentifier",
               "src": "57:6:1"
            }
          ]
       }
     ]
  },
  "name": "allocate_unbounded",
  "nativeSrc": "7:75:1",
  "nodeType": "YulFunctionDefinition",
  "returnVariables": [
     {
       "name": "memPtr",
       "nativeSrc": "40:6:1",
       "nodeType": "YulTypedName",
       "src": "40:6:1",
       "type": ""
     }
  ],
  "src": "7:75:1"
},
{
  "body": {
```

```
"nativeSrc": "177:28:1",
"nodeType": "YulBlock",
"src": "177:28:1",
"statements": [
  {
     "expression": {
       "arguments": [
          {
            "kind": "number",
            "nativeSrc": "194:1:1",
            "nodeType": "YulLiteral",
            "src": "194:1:1",
            "type": "",
             "value": "0"
          },
          {
            "kind": "number",
            "nativeSrc": "197:1:1",
            "nodeType": "YulLiteral",
            "src": "197:1:1",
            "type": "",
            "value": "0"
          }
       ],
       "functionName": {
          "name": "revert",
```

```
"nodeType": "Yulldentifier",
                                   "src": "187:6:1"
                                },
                                "nativeSrc": "187:12:1",
                                "nodeType": "YulFunctionCall",
                                "src": "187:12:1"
                              },
                              "nativeSrc": "187:12:1",
                              "nodeType": "YulExpressionStatement",
                              "src": "187:12:1"
                           }
                        ]
                      },
                                                                                            "name":
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",
                      "nativeSrc": "88:117:1",
                      "nodeType": "YulFunctionDefinition",
                      "src": "88:117:1"
                   },
                   {
                      "body": {
                         "nativeSrc": "300:28:1",
                         "nodeType": "YulBlock",
                         "src": "300:28:1",
                         "statements": [
```

"nativeSrc": "187:6:1",

```
"expression": {
  "arguments": [
     {
       "kind": "number",
       "nativeSrc": "317:1:1",
       "nodeType": "YulLiteral",
       "src": "317:1:1",
       "type": "",
       "value": "0"
     },
     {
       "kind": "number",
       "nativeSrc": "320:1:1",
       "nodeType": "YulLiteral",
       "src": "320:1:1",
       "type": "",
       "value": "0"
     }
  ],
  "functionName": {
     "name": "revert",
     "nativeSrc": "310:6:1",
     "nodeType": "Yulldentifier",
     "src": "310:6:1"
  },
```

{

```
"nodeType": "YulFunctionCall",
                                "src": "310:12:1"
                             },
                             "nativeSrc": "310:12:1",
                             "nodeType": "YulExpressionStatement",
                             "src": "310:12:1"
                           }
                        ]
                      },
                                                                                           "name":
"revert_error_c1322bf8034eace5e0b5c7295db60986aa89aae5e0ea0873e4689e076861a5db",
                      "nativeSrc": "211:117:1",
                      "nodeType": "YulFunctionDefinition",
                      "src": "211:117:1"
                   },
                   {
                      "body": {
                        "nativeSrc": "379:81:1",
                        "nodeType": "YulBlock",
                        "src": "379:81:1",
                        "statements": [
                           {
                             "nativeSrc": "389:65:1",
                             "nodeType": "YulAssignment",
                             "src": "389:65:1",
```

"nativeSrc": "310:12:1",

```
"value": {
  "arguments": [
    {
      "name": "value",
      "nativeSrc": "404:5:1",
       "nodeType": "Yulldentifier",
       "src": "404:5:1"
    },
    {
      "kind": "number",
      "nativeSrc": "411:42:1",
      "nodeType": "YulLiteral",
      "src": "411:42:1",
       "type": "",
      }
  ],
  "functionName": {
    "name": "and",
    "nativeSrc": "400:3:1",
    "nodeType": "Yulldentifier",
    "src": "400:3:1"
  },
  "nativeSrc": "400:54:1",
  "nodeType": "YulFunctionCall",
  "src": "400:54:1"
```

```
},
       "variableNames": [
          {
            "name": "cleaned",
             "nativeSrc": "389:7:1",
             "nodeType": "Yulldentifier",
            "src": "389:7:1"
          }
       ]
     }
  ]
},
"name": "cleanup_t_uint160",
"nativeSrc": "334:126:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "361:5:1",
     "nodeType": "YulTypedName",
     "src": "361:5:1",
     "type": ""
  }
],
"returnVariables": [
  {
```

```
"name": "cleaned",
       "nativeSrc": "371:7:1",
       "nodeType": "YulTypedName",
       "src": "371:7:1",
       "type": ""
     }
  ],
  "src": "334:126:1"
},
{
  "body": {
     "nativeSrc": "511:51:1",
     "nodeType": "YulBlock",
     "src": "511:51:1",
     "statements": [
       {
          "nativeSrc": "521:35:1",
          "nodeType": "YulAssignment",
          "src": "521:35:1",
          "value": {
             "arguments": [
               {
                  "name": "value",
                  "nativeSrc": "550:5:1",
                  "nodeType": "Yulldentifier",
                  "src": "550:5:1"
```

```
}
          ],
          "functionName": {
             "name": "cleanup_t_uint160",
            "nativeSrc": "532:17:1",
            "nodeType": "Yulldentifier",
            "src": "532:17:1"
          },
          "nativeSrc": "532:24:1",
          "nodeType": "YulFunctionCall",
          "src": "532:24:1"
       },
       "variableNames": [
         {
            "name": "cleaned",
             "nativeSrc": "521:7:1",
            "nodeType": "Yulldentifier",
             "src": "521:7:1"
          }
       ]
     }
  ]
},
"name": "cleanup_t_address",
"nativeSrc": "466:96:1",
"nodeType": "YulFunctionDefinition",
```

```
"parameters": [
     {
       "name": "value",
       "nativeSrc": "493:5:1",
       "nodeType": "YulTypedName",
       "src": "493:5:1",
       "type": ""
     }
  ],
  "returnVariables": [
     {
       "name": "cleaned",
       "nativeSrc": "503:7:1",
       "nodeType": "YulTypedName",
       "src": "503:7:1",
       "type": ""
     }
  ],
  "src": "466:96:1"
},
{
  "body": {
     "nativeSrc": "611:79:1",
     "nodeType": "YulBlock",
     "src": "611:79:1",
     "statements": [
```

```
"body": {
  "nativeSrc": "668:16:1",
  "nodeType": "YulBlock",
  "src": "668:16:1",
  "statements": [
     {
       "expression": {
          "arguments": [
             {
               "kind": "number",
               "nativeSrc": "677:1:1",
               "nodeType": "YulLiteral",
               "src": "677:1:1",
               "type": "",
               "value": "0"
             },
             {
               "kind": "number",
               "nativeSrc": "680:1:1",
               "nodeType": "YulLiteral",
               "src": "680:1:1",
               "type": "",
               "value": "0"
             }
          ],
```

```
"functionName": {
             "name": "revert",
             "nativeSrc": "670:6:1",
             "nodeType": "Yulldentifier",
             "src": "670:6:1"
          },
          "nativeSrc": "670:12:1",
          "nodeType": "YulFunctionCall",
          "src": "670:12:1"
       },
       "nativeSrc": "670:12:1",
       "nodeType": "YulExpressionStatement",
       "src": "670:12:1"
    }
  ]
},
"condition": {
  "arguments": [
     {
       "arguments": [
          {
             "name": "value",
             "nativeSrc": "634:5:1",
             "nodeType": "Yulldentifier",
             "src": "634:5:1"
          },
```

```
"arguments": [
       {
          "name": "value",
          "nativeSrc": "659:5:1",
          "nodeType": "Yulldentifier",
          "src": "659:5:1"
       }
     ],
     "functionName": {
       "name": "cleanup_t_address",
       "nativeSrc": "641:17:1",
       "nodeType": "Yulldentifier",
       "src": "641:17:1"
     },
     "nativeSrc": "641:24:1",
     "nodeType": "YulFunctionCall",
     "src": "641:24:1"
  }
],
"functionName": {
  "name": "eq",
  "nativeSrc": "631:2:1",
  "nodeType": "Yulldentifier",
  "src": "631:2:1"
},
```

```
"nativeSrc": "631:35:1",
               "nodeType": "YulFunctionCall",
               "src": "631:35:1"
            }
          ],
          "functionName": {
            "name": "iszero",
            "nativeSrc": "624:6:1",
            "nodeType": "Yulldentifier",
            "src": "624:6:1"
          },
          "nativeSrc": "624:43:1",
          "nodeType": "YulFunctionCall",
          "src": "624:43:1"
       },
       "nativeSrc": "621:63:1",
       "nodeType": "Yullf",
       "src": "621:63:1"
    }
  ]
},
"name": "validator_revert_t_address",
"nativeSrc": "568:122:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
```

```
"name": "value",
       "nativeSrc": "604:5:1",
       "nodeType": "YulTypedName",
       "src": "604:5:1",
       "type": ""
     }
  ],
  "src": "568:122:1"
},
{
  "body": {
     "nativeSrc": "748:87:1",
     "nodeType": "YulBlock",
     "src": "748:87:1",
     "statements": [
       {
          "nativeSrc": "758:29:1",
          "nodeType": "YulAssignment",
          "src": "758:29:1",
          "value": {
             "arguments": [
               {
                  "name": "offset",
                  "nativeSrc": "780:6:1",
                  "nodeType": "Yulldentifier",
                  "src": "780:6:1"
```

```
}
     ],
     "functionName": {
        "name": "calldataload",
        "nativeSrc": "767:12:1",
        "nodeType": "Yulldentifier",
        "src": "767:12:1"
     },
     "nativeSrc": "767:20:1",
     "nodeType": "YulFunctionCall",
     "src": "767:20:1"
  },
  "variableNames": [
     {
        "name": "value",
        "nativeSrc": "758:5:1",
        "nodeType": "Yulldentifier",
        "src": "758:5:1"
    }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value",
```

```
"nativeSrc": "823:5:1",
               "nodeType": "Yulldentifier",
               "src": "823:5:1"
            }
         ],
          "functionName": {
            "name": "validator_revert_t_address",
            "nativeSrc": "796:26:1",
            "nodeType": "Yulldentifier",
            "src": "796:26:1"
         },
          "nativeSrc": "796:33:1",
          "nodeType": "YulFunctionCall",
          "src": "796:33:1"
       },
       "nativeSrc": "796:33:1",
       "nodeType": "YulExpressionStatement",
       "src": "796:33:1"
    }
  1
},
"name": "abi_decode_t_address",
"nativeSrc": "696:139:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
```

```
"name": "offset",
     "nativeSrc": "726:6:1",
     "nodeType": "YulTypedName",
     "src": "726:6:1",
     "type": ""
  },
  {
     "name": "end",
     "nativeSrc": "734:3:1",
     "nodeType": "YulTypedName",
     "src": "734:3:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "value",
     "nativeSrc": "742:5:1",
     "nodeType": "YulTypedName",
     "src": "742:5:1",
     "type": ""
  }
],
"src": "696:139:1"
```

},

```
"body": {
  "nativeSrc": "886:32:1",
  "nodeType": "YulBlock",
  "src": "886:32:1",
  "statements": [
     {
       "nativeSrc": "896:16:1",
       "nodeType": "YulAssignment",
       "src": "896:16:1",
       "value": {
          "name": "value",
          "nativeSrc": "907:5:1",
          "nodeType": "Yulldentifier",
          "src": "907:5:1"
       },
        "variableNames": [
          {
             "name": "cleaned",
             "nativeSrc": "896:7:1",
             "nodeType": "Yulldentifier",
             "src": "896:7:1"
          }
       ]
     }
  ]
},
```

```
"name": "cleanup_t_uint256",
"nativeSrc": "841:77:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "868:5:1",
     "nodeType": "YulTypedName",
     "src": "868:5:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "cleaned",
     "nativeSrc": "878:7:1",
     "nodeType": "YulTypedName",
     "src": "878:7:1",
     "type": ""
  }
],
"src": "841:77:1"
"body": {
  "nativeSrc": "967:79:1",
```

},

```
"nodeType": "YulBlock",
"src": "967:79:1",
"statements": [
  {
     "body": {
       "nativeSrc": "1024:16:1",
       "nodeType": "YulBlock",
       "src": "1024:16:1",
       "statements": [
          {
            "expression": {
               "arguments": [
                 {
                    "kind": "number",
                    "nativeSrc": "1033:1:1",
                    "nodeType": "YulLiteral",
                    "src": "1033:1:1",
                    "type": "",
                    "value": "0"
                  },
                  {
                    "kind": "number",
                     "nativeSrc": "1036:1:1",
                    "nodeType": "YulLiteral",
                    "src": "1036:1:1",
                     "type": "",
```

```
"value": "0"
            }
          ],
          "functionName": {
             "name": "revert",
             "nativeSrc": "1026:6:1",
             "nodeType": "Yulldentifier",
             "src": "1026:6:1"
          },
          "nativeSrc": "1026:12:1",
          "nodeType": "YulFunctionCall",
          "src": "1026:12:1"
       },
       "nativeSrc": "1026:12:1",
       "nodeType": "YulExpressionStatement",
       "src": "1026:12:1"
    }
  ]
},
"condition": {
  "arguments": [
     {
       "arguments": [
          {
             "name": "value",
             "nativeSrc": "990:5:1",
```

```
"nodeType": "Yulldentifier",
     "src": "990:5:1"
  },
  {
     "arguments": [
       {
          "name": "value",
          "nativeSrc": "1015:5:1",
          "nodeType": "Yulldentifier",
          "src": "1015:5:1"
       }
     ],
     "functionName": {
       "name": "cleanup_t_uint256",
       "nativeSrc": "997:17:1",
       "nodeType": "Yulldentifier",
       "src": "997:17:1"
     },
     "nativeSrc": "997:24:1",
     "nodeType": "YulFunctionCall",
     "src": "997:24:1"
  }
],
"functionName": {
  "name": "eq",
  "nativeSrc": "987:2:1",
```

```
"nodeType": "Yulldentifier",
                  "src": "987:2:1"
               },
               "nativeSrc": "987:35:1",
               "nodeType": "YulFunctionCall",
               "src": "987:35:1"
            }
          ],
          "functionName": {
             "name": "iszero",
             "nativeSrc": "980:6:1",
             "nodeType": "Yulldentifier",
             "src": "980:6:1"
          },
          "nativeSrc": "980:43:1",
          "nodeType": "YulFunctionCall",
          "src": "980:43:1"
       },
       "nativeSrc": "977:63:1",
       "nodeType": "Yullf",
       "src": "977:63:1"
    }
  ]
},
"name": "validator_revert_t_uint256",
"nativeSrc": "924:122:1",
```

```
"nodeType": "YulFunctionDefinition",
  "parameters": [
     {
       "name": "value",
       "nativeSrc": "960:5:1",
       "nodeType": "YulTypedName",
       "src": "960:5:1",
       "type": ""
     }
  ],
  "src": "924:122:1"
},
{
  "body": {
     "nativeSrc": "1104:87:1",
     "nodeType": "YulBlock",
     "src": "1104:87:1",
     "statements": [
       {
          "nativeSrc": "1114:29:1",
          "nodeType": "YulAssignment",
          "src": "1114:29:1",
          "value": {
            "arguments": [
               {
                 "name": "offset",
```

```
"nativeSrc": "1136:6:1",
       "nodeType": "Yulldentifier",
       "src": "1136:6:1"
    }
  ],
  "functionName": {
     "name": "calldataload",
     "nativeSrc": "1123:12:1",
     "nodeType": "Yulldentifier",
     "src": "1123:12:1"
  },
  "nativeSrc": "1123:20:1",
  "nodeType": "YulFunctionCall",
  "src": "1123:20:1"
},
"variableNames": [
  {
     "name": "value",
     "nativeSrc": "1114:5:1",
     "nodeType": "Yulldentifier",
     "src": "1114:5:1"
  }
]
"expression": {
```

},

```
"arguments": [
            {
               "name": "value",
               "nativeSrc": "1179:5:1",
               "nodeType": "Yulldentifier",
               "src": "1179:5:1"
            }
          ],
          "functionName": {
            "name": "validator_revert_t_uint256",
            "nativeSrc": "1152:26:1",
            "nodeType": "Yulldentifier",
            "src": "1152:26:1"
          },
          "nativeSrc": "1152:33:1",
          "nodeType": "YulFunctionCall",
          "src": "1152:33:1"
       },
       "nativeSrc": "1152:33:1",
       "nodeType": "YulExpressionStatement",
       "src": "1152:33:1"
    }
  ]
},
"name": "abi_decode_t_uint256",
"nativeSrc": "1052:139:1",
```

```
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "offset",
     "nativeSrc": "1082:6:1",
     "nodeType": "YulTypedName",
     "src": "1082:6:1",
     "type": ""
  },
  {
     "name": "end",
     "nativeSrc": "1090:3:1",
     "nodeType": "YulTypedName",
     "src": "1090:3:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "value",
     "nativeSrc": "1098:5:1",
     "nodeType": "YulTypedName",
     "src": "1098:5:1",
     "type": ""
  }
],
```

```
},
                   {
                      "body": {
                         "nativeSrc": "1280:391:1",
                         "nodeType": "YulBlock",
                         "src": "1280:391:1",
                         "statements": [
                           {
                              "body": {
                                "nativeSrc": "1326:83:1",
                                "nodeType": "YulBlock",
                                "src": "1326:83:1",
                                "statements": [
                                  {
                                     "expression": {
                                        "arguments": [],
                                        "functionName": {
                                                                                            "name":
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",
                                          "nativeSrc": "1328:77:1",
                                          "nodeType": "Yulldentifier",
                                          "src": "1328:77:1"
                                        },
                                        "nativeSrc": "1328:79:1",
                                        "nodeType": "YulFunctionCall",
```

"src": "1052:139:1"

```
"src": "1328:79:1"
       },
       "nativeSrc": "1328:79:1",
       "nodeType": "YulExpressionStatement",
       "src": "1328:79:1"
     }
  ]
},
"condition": {
  "arguments": [
    {
       "arguments": [
          {
             "name": "dataEnd",
             "nativeSrc": "1301:7:1",
             "nodeType": "Yulldentifier",
             "src": "1301:7:1"
          },
          {
             "name": "headStart",
             "nativeSrc": "1310:9:1",
             "nodeType": "Yulldentifier",
             "src": "1310:9:1"
          }
       ],
       "functionName": {
```

```
"name": "sub",
        "nativeSrc": "1297:3:1",
        "nodeType": "Yulldentifier",
        "src": "1297:3:1"
     },
     "nativeSrc": "1297:23:1",
     "nodeType": "YulFunctionCall",
     "src": "1297:23:1"
  },
  {
     "kind": "number",
     "nativeSrc": "1322:2:1",
     "nodeType": "YulLiteral",
     "src": "1322:2:1",
     "type": "",
     "value": "64"
  }
],
"functionName": {
  "name": "slt",
  "nativeSrc": "1293:3:1",
  "nodeType": "Yulldentifier",
   "src": "1293:3:1"
},
"nativeSrc": "1293:32:1",
"nodeType": "YulFunctionCall",
```

```
"src": "1293:32:1"
  },
  "nativeSrc": "1290:119:1",
  "nodeType": "Yullf",
  "src": "1290:119:1"
},
{
  "nativeSrc": "1419:117:1",
  "nodeType": "YulBlock",
  "src": "1419:117:1",
  "statements": [
     {
        "nativeSrc": "1434:15:1",
        "nodeType": "YulVariableDeclaration",
        "src": "1434:15:1",
        "value": {
          "kind": "number",
          "nativeSrc": "1448:1:1",
          "nodeType": "YulLiteral",
          "src": "1448:1:1",
          "type": "",
          "value": "0"
       },
        "variables": [
          {
             "name": "offset",
```

```
"nativeSrc": "1438:6:1",
        "nodeType": "YulTypedName",
        "src": "1438:6:1",
        "type": ""
     }
  ]
},
{
  "nativeSrc": "1463:63:1",
   "nodeType": "YulAssignment",
   "src": "1463:63:1",
   "value": {
     "arguments": [
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "1498:9:1",
               "nodeType": "Yulldentifier",
               "src": "1498:9:1"
             },
            {
               "name": "offset",
               "nativeSrc": "1509:6:1",
               "nodeType": "Yulldentifier",
               "src": "1509:6:1"
```

```
}
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "1494:3:1",
       "nodeType": "Yulldentifier",
       "src": "1494:3:1"
     },
     "nativeSrc": "1494:22:1",
     "nodeType": "YulFunctionCall",
     "src": "1494:22:1"
  },
  {
     "name": "dataEnd",
     "nativeSrc": "1518:7:1",
     "nodeType": "Yulldentifier",
     "src": "1518:7:1"
  }
],
"functionName": {
  "name": "abi_decode_t_address",
  "nativeSrc": "1473:20:1",
  "nodeType": "Yulldentifier",
  "src": "1473:20:1"
},
"nativeSrc": "1473:53:1",
```

```
"nodeType": "YulFunctionCall",
          "src": "1473:53:1"
       },
        "variableNames": [
          {
             "name": "value0",
             "nativeSrc": "1463:6:1",
             "nodeType": "Yulldentifier",
             "src": "1463:6:1"
          }
       ]
     }
  ]
},
{
  "nativeSrc": "1546:118:1",
  "nodeType": "YulBlock",
  "src": "1546:118:1",
  "statements": [
     {
       "nativeSrc": "1561:16:1",
        "nodeType": "YulVariableDeclaration",
       "src": "1561:16:1",
        "value": {
          "kind": "number",
          "nativeSrc": "1575:2:1",
```

```
"nodeType": "YulLiteral",
     "src": "1575:2:1",
     "type": "",
     "value": "32"
  },
   "variables": [
     {
        "name": "offset",
        "nativeSrc": "1565:6:1",
        "nodeType": "YulTypedName",
        "src": "1565:6:1",
        "type": ""
     }
  ]
},
  "nativeSrc": "1591:63:1",
  "nodeType": "YulAssignment",
  "src": "1591:63:1",
   "value": {
     "arguments": [
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "1626:9:1",
```

```
"nodeType": "Yulldentifier",
        "src": "1626:9:1"
     },
     {
        "name": "offset",
        "nativeSrc": "1637:6:1",
        "nodeType": "Yulldentifier",
        "src": "1637:6:1"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "1622:3:1",
     "nodeType": "Yulldentifier",
     "src": "1622:3:1"
  },
  "nativeSrc": "1622:22:1",
  "nodeType": "YulFunctionCall",
  "src": "1622:22:1"
},
{
  "name": "dataEnd",
  "nativeSrc": "1646:7:1",
  "nodeType": "Yulldentifier",
  "src": "1646:7:1"
}
```

```
],
               "functionName": {
                 "name": "abi_decode_t_uint256",
                 "nativeSrc": "1601:20:1",
                 "nodeType": "Yulldentifier",
                 "src": "1601:20:1"
               },
               "nativeSrc": "1601:53:1",
               "nodeType": "YulFunctionCall",
               "src": "1601:53:1"
            },
            "variableNames": [
               {
                 "name": "value1",
                 "nativeSrc": "1591:6:1",
                 "nodeType": "Yulldentifier",
                 "src": "1591:6:1"
               }
            ]
       ]
     }
  ]
},
"name": "abi_decode_tuple_t_addresst_uint256",
"nativeSrc": "1197:474:1",
```

```
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
    "name": "headStart",
    "nativeSrc": "1242:9:1",
    "nodeType": "YulTypedName",
    "src": "1242:9:1",
    "type": ""
  },
  {
    "name": "dataEnd",
    "nativeSrc": "1253:7:1",
    "nodeType": "YulTypedName",
    "src": "1253:7:1",
    "type": ""
  }
],
"returnVariables": [
  {
    "name": "value0",
    "nativeSrc": "1265:6:1",
    "nodeType": "YulTypedName",
    "src": "1265:6:1",
    "type": ""
  },
```

```
"name": "value1",
       "nativeSrc": "1273:6:1",
       "nodeType": "YulTypedName",
       "src": "1273:6:1",
       "type": ""
     }
  ],
  "src": "1197:474:1"
},
{
  "body": {
     "nativeSrc": "1743:263:1",
     "nodeType": "YulBlock",
     "src": "1743:263:1",
     "statements": [
       {
          "body": {
            "nativeSrc": "1789:83:1",
            "nodeType": "YulBlock",
            "src": "1789:83:1",
            "statements": [
               {
                  "expression": {
                    "arguments": [],
                    "functionName": {
```

```
"nativeSrc": "1791:77:1",
             "nodeType": "Yulldentifier",
             "src": "1791:77:1"
          },
          "nativeSrc": "1791:79:1",
          "nodeType": "YulFunctionCall",
          "src": "1791:79:1"
       },
       "nativeSrc": "1791:79:1",
       "nodeType": "YulExpressionStatement",\\
       "src": "1791:79:1"
     }
  ]
},
"condition": {
  "arguments": [
     {
       "arguments": [
          {
             "name": "dataEnd",
             "nativeSrc": "1764:7:1",
             "nodeType": "Yulldentifier",
             "src": "1764:7:1"
          },
```

```
"name": "headStart",
          "nativeSrc": "1773:9:1",
          "nodeType": "Yulldentifier",
          "src": "1773:9:1"
       }
     ],
     "functionName": {
        "name": "sub",
        "nativeSrc": "1760:3:1",
        "nodeType": "Yulldentifier",
       "src": "1760:3:1"
     },
     "nativeSrc": "1760:23:1",
     "nodeType": "YulFunctionCall",
     "src": "1760:23:1"
  },
  {
     "kind": "number",
     "nativeSrc": "1785:2:1",
     "nodeType": "YulLiteral",
     "src": "1785:2:1",
     "type": "",
     "value": "32"
  }
],
"functionName": {
```

```
"name": "slt",
        "nativeSrc": "1756:3:1",
        "nodeType": "Yulldentifier",
        "src": "1756:3:1"
     },
     "nativeSrc": "1756:32:1",
     "nodeType": "YulFunctionCall",
     "src": "1756:32:1"
  },
  "nativeSrc": "1753:119:1",
  "nodeType": "Yullf",
  "src": "1753:119:1"
},
{
  "nativeSrc": "1882:117:1",
  "nodeType": "YulBlock",
  "src": "1882:117:1",
  "statements": [
     {
       "nativeSrc": "1897:15:1",
        "nodeType": "YulVariableDeclaration",
        "src": "1897:15:1",
        "value": {
          "kind": "number",
          "nativeSrc": "1911:1:1",
          "nodeType": "YulLiteral",
```

```
"src": "1911:1:1",
     "type": "",
     "value": "0"
  },
   "variables": [
     {
        "name": "offset",
        "nativeSrc": "1901:6:1",
        "nodeType": "YulTypedName",
        "src": "1901:6:1",
        "type": ""
     }
  ]
},
{
  "nativeSrc": "1926:63:1",
  "nodeType": "YulAssignment",
  "src": "1926:63:1",
   "value": {
     "arguments": [
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "1961:9:1",
               "nodeType": "Yulldentifier",
```

```
"src": "1961:9:1"
       },
       {
          "name": "offset",
          "nativeSrc": "1972:6:1",
          "nodeType": "Yulldentifier",
          "src": "1972:6:1"
       }
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "1957:3:1",
       "nodeType": "Yulldentifier",
       "src": "1957:3:1"
     },
     "nativeSrc": "1957:22:1",
     "nodeType": "YulFunctionCall",
     "src": "1957:22:1"
  },
  {
     "name": "dataEnd",
     "nativeSrc": "1981:7:1",
     "nodeType": "Yulldentifier",
     "src": "1981:7:1"
  }
],
```

```
"functionName": {
                 "name": "abi_decode_t_uint256",
                 "nativeSrc": "1936:20:1",
                 "nodeType": "Yulldentifier",
                 "src": "1936:20:1"
               },
               "nativeSrc": "1936:53:1",
               "nodeType": "YulFunctionCall",
               "src": "1936:53:1"
            },
            "variableNames": [
               {
                 "name": "value0",
                 "nativeSrc": "1926:6:1",
                 "nodeType": "Yulldentifier",
                 "src": "1926:6:1"
               }
            ]
         }
       ]
    }
  ]
},
"name": "abi_decode_tuple_t_uint256",
"nativeSrc": "1677:329:1",
"nodeType": "YulFunctionDefinition",
```

```
"parameters": [
  {
     "name": "headStart",
     "nativeSrc": "1713:9:1",
     "nodeType": "YulTypedName",
     "src": "1713:9:1",
     "type": ""
  },
  {
     "name": "dataEnd",
     "nativeSrc": "1724:7:1",
     "nodeType": "YulTypedName",
     "src": "1724:7:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "value0",
     "nativeSrc": "1736:6:1",
     "nodeType": "YulTypedName",
     "src": "1736:6:1",
     "type": ""
  }
],
"src": "1677:329:1"
```

```
},
{
  "body": {
     "nativeSrc": "2077:53:1",
     "nodeType": "YulBlock",
     "src": "2077:53:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "name": "pos",
                  "nativeSrc": "2094:3:1",
                  "nodeType": "Yulldentifier",
                  "src": "2094:3:1"
               },
               {
                  "arguments": [
                    {
                       "name": "value",
                       "nativeSrc": "2117:5:1",
                       "nodeType": "Yulldentifier",
                       "src": "2117:5:1"
                    }
                  ],
                  "functionName": {
```

```
"name": "cleanup_t_address",
                  "nativeSrc": "2099:17:1",
                  "nodeType": "Yulldentifier",
                  "src": "2099:17:1"
               },
               "nativeSrc": "2099:24:1",
               "nodeType": "YulFunctionCall",
               "src": "2099:24:1"
            }
          ],
          "functionName": {
             "name": "mstore",
            "nativeSrc": "2087:6:1",
             "nodeType": "Yulldentifier",
             "src": "2087:6:1"
          },
          "nativeSrc": "2087:37:1",
          "nodeType": "YulFunctionCall",
          "src": "2087:37:1"
       },
       "nativeSrc": "2087:37:1",
       "nodeType": "YulExpressionStatement",
       "src": "2087:37:1"
     }
  ]
},
```

```
"name": "abi_encode_t_address_to_t_address_fromStack",
"nativeSrc": "2012:118:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "2065:5:1",
     "nodeType": "YulTypedName",
     "src": "2065:5:1",
     "type": ""
  },
  {
     "name": "pos",
     "nativeSrc": "2072:3:1",
     "nodeType": "YulTypedName",
     "src": "2072:3:1",
     "type": ""
  }
],
"src": "2012:118:1"
"body": {
  "nativeSrc": "2201:53:1",
  "nodeType": "YulBlock",
  "src": "2201:53:1",
```

},

```
"statements": [
  {
     "expression": {
       "arguments": [
          {
            "name": "pos",
            "nativeSrc": "2218:3:1",
            "nodeType": "Yulldentifier",
            "src": "2218:3:1"
          },
          {
            "arguments": [
               {
                  "name": "value",
                  "nativeSrc": "2241:5:1",
                  "nodeType": "Yulldentifier",
                  "src": "2241:5:1"
               }
            ],
            "functionName": {
               "name": "cleanup_t_uint256",
               "nativeSrc": "2223:17:1",
               "nodeType": "Yulldentifier",
               "src": "2223:17:1"
            },
            "nativeSrc": "2223:24:1",
```

```
"nodeType": "YulFunctionCall",
               "src": "2223:24:1"
            }
         ],
          "functionName": {
            "name": "mstore",
            "nativeSrc": "2211:6:1",
            "nodeType": "Yulldentifier",
            "src": "2211:6:1"
         },
          "nativeSrc": "2211:37:1",
          "nodeType": "YulFunctionCall",
          "src": "2211:37:1"
       },
       "nativeSrc": "2211:37:1",
       "nodeType": "YulExpressionStatement",
       "src": "2211:37:1"
    }
  1
},
"name": "abi_encode_t_uint256_to_t_uint256_fromStack",
"nativeSrc": "2136:118:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
    "name": "value",
```

```
"nativeSrc": "2189:5:1",
       "nodeType": "YulTypedName",
       "src": "2189:5:1",
       "type": ""
     },
     {
       "name": "pos",
       "nativeSrc": "2196:3:1",
       "nodeType": "YulTypedName",
       "src": "2196:3:1",
       "type": ""
     }
  ],
  "src": "2136:118:1"
},
{
  "body": {
     "nativeSrc": "2414:288:1",
     "nodeType": "YulBlock",
     "src": "2414:288:1",
     "statements": [
       {
          "nativeSrc": "2424:26:1",
          "nodeType": "YulAssignment",
          "src": "2424:26:1",
          "value": {
```

```
"arguments": [
  {
     "name": "headStart",
     "nativeSrc": "2436:9:1",
     "nodeType": "Yulldentifier",
     "src": "2436:9:1"
  },
  {
     "kind": "number",
     "nativeSrc": "2447:2:1",
     "nodeType": "YulLiteral",
     "src": "2447:2:1",
     "type": "",
     "value": "96"
  }
],
"functionName": {
  "name": "add",
  "nativeSrc": "2432:3:1",
  "nodeType": "Yulldentifier",
  "src": "2432:3:1"
},
"nativeSrc": "2432:18:1",
"nodeType": "YulFunctionCall",
"src": "2432:18:1"
```

},

```
"variableNames": [
     {
        "name": "tail",
        "nativeSrc": "2424:4:1",
        "nodeType": "Yulldentifier",
        "src": "2424:4:1"
    }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "2504:6:1",
          "nodeType": "Yulldentifier",
          "src": "2504:6:1"
       },
       {
          "arguments": [
             {
               "name": "headStart",
               "nativeSrc": "2517:9:1",
               "nodeType": "Yulldentifier",
               "src": "2517:9:1"
             },
```

```
{
          "kind": "number",
          "nativeSrc": "2528:1:1",
          "nodeType": "YulLiteral",
          "src": "2528:1:1",
          "type": "",
          "value": "0"
       }
     ],
     "functionName": {
        "name": "add",
        "nativeSrc": "2513:3:1",
        "nodeType": "Yulldentifier",
        "src": "2513:3:1"
     },
     "nativeSrc": "2513:17:1",
     "nodeType": "YulFunctionCall",
     "src": "2513:17:1"
  }
],
"functionName": {
   "name": "abi_encode_t_address_to_t_address_fromStack",
   "nativeSrc": "2460:43:1",
   "nodeType": "Yulldentifier",
  "src": "2460:43:1"
},
```

```
"nativeSrc": "2460:71:1",
     "nodeType": "YulFunctionCall",
     "src": "2460:71:1"
  },
  "nativeSrc": "2460:71:1",
  "nodeType": "YulExpressionStatement",
  "src": "2460:71:1"
},
{
  "expression": {
     "arguments": [
       {
          "name": "value1",
          "nativeSrc": "2585:6:1",
          "nodeType": "Yulldentifier",
          "src": "2585:6:1"
       },
       {
          "arguments": [
             {
               "name": "headStart",
               "nativeSrc": "2598:9:1",
               "nodeType": "Yulldentifier",
               "src": "2598:9:1"
             },
```

```
"kind": "number",
          "nativeSrc": "2609:2:1",
          "nodeType": "YulLiteral",
          "src": "2609:2:1",
          "type": "",
          "value": "32"
       }
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "2594:3:1",
       "nodeType": "Yulldentifier",
       "src": "2594:3:1"
     },
     "nativeSrc": "2594:18:1",
     "nodeType": "YulFunctionCall",
     "src": "2594:18:1"
  }
],
"functionName": {
  "name": "abi_encode_t_uint256_to_t_uint256_fromStack",
  "nativeSrc": "2541:43:1",
  "nodeType": "Yulldentifier",
  "src": "2541:43:1"
},
"nativeSrc": "2541:72:1",
```

```
"nodeType": "YulFunctionCall",
     "src": "2541:72:1"
  },
  "nativeSrc": "2541:72:1",
  "nodeType": "YulExpressionStatement",
  "src": "2541:72:1"
},
{
  "expression": {
     "arguments": [
       {
          "name": "value2",
          "nativeSrc": "2667:6:1",
          "nodeType": "Yulldentifier",
          "src": "2667:6:1"
       },
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "2680:9:1",
               "nodeType": "Yulldentifier",
               "src": "2680:9:1"
             },
             {
               "kind": "number",
```

```
"nativeSrc": "2691:2:1",
          "nodeType": "YulLiteral",
          "src": "2691:2:1",
          "type": "",
          "value": "64"
       }
     ],
     "functionName": {
        "name": "add",
        "nativeSrc": "2676:3:1",
        "nodeType": "Yulldentifier",
        "src": "2676:3:1"
     },
     "nativeSrc": "2676:18:1",
     "nodeType": "YulFunctionCall",
     "src": "2676:18:1"
  }
],
"functionName": {
   "name": "abi_encode_t_uint256_to_t_uint256_fromStack",
   "nativeSrc": "2623:43:1",
   "nodeType": "Yulldentifier",
   "src": "2623:43:1"
},
"nativeSrc": "2623:72:1",
"nodeType": "YulFunctionCall",
```

```
},
                             "nativeSrc": "2623:72:1",
                             "nodeType": "YulExpressionStatement",
                             "src": "2623:72:1"
                           }
                        ]
                      },
                                                                                           "name":
"abi_encode_tuple_t_address_t_uint256_t_uint256__to_t_address_t_uint256_t_uint256__fromStack
_reversed",
                      "nativeSrc": "2260:442:1",
                      "nodeType": "YulFunctionDefinition",
                      "parameters": [
                        {
                           "name": "headStart",
                           "nativeSrc": "2370:9:1",
                           "nodeType": "YulTypedName",
                           "src": "2370:9:1",
                           "type": ""
                        },
                        {
                           "name": "value2",
                           "nativeSrc": "2382:6:1",
                           "nodeType": "YulTypedName",
                           "src": "2382:6:1",
```

"src": "2623:72:1"

```
"type": ""
  },
  {
     "name": "value1",
     "nativeSrc": "2390:6:1",
     "nodeType": "YulTypedName",
     "src": "2390:6:1",
     "type": ""
  },
  {
     "name": "value0",
     "nativeSrc": "2398:6:1",
     "nodeType": "YulTypedName",
     "src": "2398:6:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "tail",
     "nativeSrc": "2409:4:1",
     "nodeType": "YulTypedName",
     "src": "2409:4:1",
     "type": ""
  }
],
```

```
},
                   {
                      "body": {
                         "nativeSrc": "2774:263:1",
                         "nodeType": "YulBlock",
                         "src": "2774:263:1",
                         "statements": [
                           {
                              "body": {
                                "nativeSrc": "2820:83:1",
                                "nodeType": "YulBlock",
                                "src": "2820:83:1",
                                "statements": [
                                  {
                                     "expression": {
                                        "arguments": [],
                                        "functionName": {
                                                                                            "name":
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",
                                          "nativeSrc": "2822:77:1",
                                          "nodeType": "Yulldentifier",
                                          "src": "2822:77:1"
                                        },
                                        "nativeSrc": "2822:79:1",
                                        "nodeType": "YulFunctionCall",
```

"src": "2260:442:1"

```
"src": "2822:79:1"
       },
       "nativeSrc": "2822:79:1",
       "nodeType": "YulExpressionStatement",
       "src": "2822:79:1"
     }
  ]
},
"condition": {
  "arguments": [
    {
       "arguments": [
          {
             "name": "dataEnd",
             "nativeSrc": "2795:7:1",
             "nodeType": "Yulldentifier",
             "src": "2795:7:1"
          },
          {
             "name": "headStart",
             "nativeSrc": "2804:9:1",
             "nodeType": "Yulldentifier",
             "src": "2804:9:1"
          }
       ],
       "functionName": {
```

```
"name": "sub",
        "nativeSrc": "2791:3:1",
        "nodeType": "Yulldentifier",
        "src": "2791:3:1"
     },
     "nativeSrc": "2791:23:1",
     "nodeType": "YulFunctionCall",
     "src": "2791:23:1"
  },
  {
     "kind": "number",
     "nativeSrc": "2816:2:1",
     "nodeType": "YulLiteral",
     "src": "2816:2:1",
     "type": "",
     "value": "32"
  }
],
"functionName": {
  "name": "slt",
  "nativeSrc": "2787:3:1",
  "nodeType": "Yulldentifier",
   "src": "2787:3:1"
},
"nativeSrc": "2787:32:1",
"nodeType": "YulFunctionCall",
```

```
"src": "2787:32:1"
  },
  "nativeSrc": "2784:119:1",
  "nodeType": "Yullf",
  "src": "2784:119:1"
},
{
  "nativeSrc": "2913:117:1",
  "nodeType": "YulBlock",
  "src": "2913:117:1",
  "statements": [
     {
        "nativeSrc": "2928:15:1",
        "nodeType": "YulVariableDeclaration",
        "src": "2928:15:1",
        "value": {
          "kind": "number",
          "nativeSrc": "2942:1:1",
          "nodeType": "YulLiteral",
          "src": "2942:1:1",
          "type": "",
          "value": "0"
       },
        "variables": [
          {
             "name": "offset",
```

```
"nativeSrc": "2932:6:1",
        "nodeType": "YulTypedName",
        "src": "2932:6:1",
        "type": ""
     }
  ]
},
{
  "nativeSrc": "2957:63:1",
   "nodeType": "YulAssignment",
   "src": "2957:63:1",
   "value": {
     "arguments": [
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "2992:9:1",
               "nodeType": "Yulldentifier",
               "src": "2992:9:1"
             },
            {
               "name": "offset",
               "nativeSrc": "3003:6:1",
               "nodeType": "Yulldentifier",
               "src": "3003:6:1"
```

```
}
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "2988:3:1",
       "nodeType": "Yulldentifier",
       "src": "2988:3:1"
     },
     "nativeSrc": "2988:22:1",
     "nodeType": "YulFunctionCall",
     "src": "2988:22:1"
  },
  {
     "name": "dataEnd",
     "nativeSrc": "3012:7:1",
     "nodeType": "Yulldentifier",
     "src": "3012:7:1"
  }
],
"functionName": {
  "name": "abi_decode_t_address",
  "nativeSrc": "2967:20:1",
  "nodeType": "Yulldentifier",
  "src": "2967:20:1"
},
"nativeSrc": "2967:53:1",
```

```
"nodeType": "YulFunctionCall",
               "src": "2967:53:1"
            },
            "variableNames": [
               {
                 "name": "value0",
                 "nativeSrc": "2957:6:1",
                 "nodeType": "Yulldentifier",
                 "src": "2957:6:1"
               }
            ]
         }
       ]
    }
  ]
},
"name": "abi_decode_tuple_t_address",
"nativeSrc": "2708:329:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
    "name": "headStart",
    "nativeSrc": "2744:9:1",
    "nodeType": "YulTypedName",
    "src": "2744:9:1",
     "type": ""
```

```
},
     {
       "name": "dataEnd",
       "nativeSrc": "2755:7:1",
       "nodeType": "YulTypedName",
       "src": "2755:7:1",
       "type": ""
     }
  ],
  "returnVariables": [
     {
       "name": "value0",
       "nativeSrc": "2767:6:1",
       "nodeType": "YulTypedName",
       "src": "2767:6:1",
       "type": ""
     }
  ],
  "src": "2708:329:1"
},
  "body": {
     "nativeSrc": "3169:206:1",
     "nodeType": "YulBlock",
     "src": "3169:206:1",
     "statements": [
```

```
"nativeSrc": "3179:26:1",
"nodeType": "YulAssignment",
"src": "3179:26:1",
"value": {
  "arguments": [
    {
       "name": "headStart",
       "nativeSrc": "3191:9:1",
       "nodeType": "Yulldentifier",
       "src": "3191:9:1"
     },
     {
       "kind": "number",
       "nativeSrc": "3202:2:1",
       "nodeType": "YulLiteral",
       "src": "3202:2:1",
       "type": "",
       "value": "64"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "3187:3:1",
     "nodeType": "Yulldentifier",
     "src": "3187:3:1"
```

```
},
     "nativeSrc": "3187:18:1",
     "nodeType": "YulFunctionCall",
     "src": "3187:18:1"
  },
  "variableNames": [
     {
        "name": "tail",
        "nativeSrc": "3179:4:1",
        "nodeType": "Yulldentifier",
        "src": "3179:4:1"
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "3259:6:1",
          "nodeType": "Yulldentifier",
          "src": "3259:6:1"
       },
       {
          "arguments": [
             {
```

```
"name": "headStart",
          "nativeSrc": "3272:9:1",
          "nodeType": "Yulldentifier",
          "src": "3272:9:1"
       },
        {
          "kind": "number",
          "nativeSrc": "3283:1:1",
          "nodeType": "YulLiteral",
          "src": "3283:1:1",
          "type": "",
          "value": "0"
       }
     ],
     "functionName": {
        "name": "add",
        "nativeSrc": "3268:3:1",
        "nodeType": "Yulldentifier",
        "src": "3268:3:1"
     },
     "nativeSrc": "3268:17:1",
     "nodeType": "YulFunctionCall",
     "src": "3268:17:1"
  }
],
"functionName": {
```

```
"name": "abi_encode_t_uint256_to_t_uint256_fromStack",
        "nativeSrc": "3215:43:1",
        "nodeType": "Yulldentifier",
        "src": "3215:43:1"
     },
     "nativeSrc": "3215:71:1",
     "nodeType": "YulFunctionCall",
     "src": "3215:71:1"
  },
  "nativeSrc": "3215:71:1",
  "nodeType": "YulExpressionStatement",
  "src": "3215:71:1"
},
{
  "expression": {
     "arguments": [
       {
          "name": "value1",
          "nativeSrc": "3340:6:1",
          "nodeType": "Yulldentifier",
          "src": "3340:6:1"
       },
       {
          "arguments": [
            {
               "name": "headStart",
```

```
"nativeSrc": "3353:9:1",
          "nodeType": "Yulldentifier",
          "src": "3353:9:1"
       },
       {
          "kind": "number",
          "nativeSrc": "3364:2:1",
          "nodeType": "YulLiteral",
          "src": "3364:2:1",
          "type": "",
          "value": "32"
       }
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "3349:3:1",
       "nodeType": "Yulldentifier",
       "src": "3349:3:1"
     },
     "nativeSrc": "3349:18:1",
     "nodeType": "YulFunctionCall",
     "src": "3349:18:1"
  }
],
"functionName": {
  "name": "abi_encode_t_uint256_to_t_uint256_fromStack",
```

```
"nodeType": "Yulldentifier",
                                   "src": "3296:43:1"
                                },
                                "nativeSrc": "3296:72:1",
                                "nodeType": "YulFunctionCall",
                                "src": "3296:72:1"
                              },
                              "nativeSrc": "3296:72:1",
                              "nodeType": "YulExpressionStatement",
                              "src": "3296:72:1"
                           }
                        ]
                      },
                                                                                            "name":
"abi_encode_tuple_t_uint256_t_uint256__to_t_uint256_t_uint256__fromStack_reversed",
                      "nativeSrc": "3043:332:1",
                      "nodeType": "YulFunctionDefinition",
                      "parameters": [
                         {
                           "name": "headStart",
                           "nativeSrc": "3133:9:1",
                           "nodeType": "YulTypedName",
                           "src": "3133:9:1",
                           "type": ""
                        },
```

"nativeSrc": "3296:43:1",

```
"name": "value1",
       "nativeSrc": "3145:6:1",
       "nodeType": "YulTypedName",
       "src": "3145:6:1",
       "type": ""
     },
     {
       "name": "value0",
       "nativeSrc": "3153:6:1",
       "nodeType": "YulTypedName",
       "src": "3153:6:1",
       "type": ""
     }
  ],
  "returnVariables": [
     {
       "name": "tail",
       "nativeSrc": "3164:4:1",
       "nodeType": "YulTypedName",
       "src": "3164:4:1",
       "type": ""
     }
  ],
  "src": "3043:332:1"
},
```

```
"body": {
  "nativeSrc": "3479:124:1",
  "nodeType": "YulBlock",
  "src": "3479:124:1",
  "statements": [
    {
       "nativeSrc": "3489:26:1",
       "nodeType": "YulAssignment",
       "src": "3489:26:1",
       "value": {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "3501:9:1",
               "nodeType": "Yulldentifier",
               "src": "3501:9:1"
            },
            {
               "kind": "number",
               "nativeSrc": "3512:2:1",
               "nodeType": "YulLiteral",
               "src": "3512:2:1",
               "type": "",
               "value": "32"
            }
```

```
],
     "functionName": {
        "name": "add",
        "nativeSrc": "3497:3:1",
        "nodeType": "Yulldentifier",
        "src": "3497:3:1"
     },
     "nativeSrc": "3497:18:1",
     "nodeType": "YulFunctionCall",
     "src": "3497:18:1"
  },
  "variableNames": [
     {
        "name": "tail",
        "nativeSrc": "3489:4:1",
        "nodeType": "Yulldentifier",
       "src": "3489:4:1"
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "3569:6:1",
```

```
"nodeType": "Yulldentifier",
  "src": "3569:6:1"
},
{
  "arguments": [
     {
        "name": "headStart",
        "nativeSrc": "3582:9:1",
        "nodeType": "Yulldentifier",
        "src": "3582:9:1"
     },
     {
        "kind": "number",
        "nativeSrc": "3593:1:1",
        "nodeType": "YulLiteral",
        "src": "3593:1:1",
        "type": "",
        "value": "0"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "3578:3:1",
     "nodeType": "Yulldentifier",
     "src": "3578:3:1"
  },
```

```
"nativeSrc": "3578:17:1",
               "nodeType": "YulFunctionCall",
              "src": "3578:17:1"
            }
         ],
          "functionName": {
            "name": "abi_encode_t_uint256_to_t_uint256_fromStack",
            "nativeSrc": "3525:43:1",
            "nodeType": "Yulldentifier",
            "src": "3525:43:1"
         },
          "nativeSrc": "3525:71:1",
          "nodeType": "YulFunctionCall",
          "src": "3525:71:1"
       },
       "nativeSrc": "3525:71:1",
       "nodeType": "YulExpressionStatement",
       "src": "3525:71:1"
    }
  ]
},
"name": "abi_encode_tuple_t_uint256__to_t_uint256__fromStack_reversed",
"nativeSrc": "3381:222:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
```

```
"name": "headStart",
     "nativeSrc": "3451:9:1",
     "nodeType": "YulTypedName",
     "src": "3451:9:1",
     "type": ""
  },
  {
     "name": "value0",
     "nativeSrc": "3463:6:1",
     "nodeType": "YulTypedName",
     "src": "3463:6:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "tail",
     "nativeSrc": "3474:4:1",
     "nodeType": "YulTypedName",
     "src": "3474:4:1",
     "type": ""
  }
],
"src": "3381:222:1"
```

},

{

```
"body": {
  "nativeSrc": "3664:53:1",
  "nodeType": "YulBlock",
  "src": "3664:53:1",
  "statements": [
    {
       "expression": {
          "arguments": [
            {
               "name": "pos",
               "nativeSrc": "3681:3:1",
               "nodeType": "Yulldentifier",
               "src": "3681:3:1"
            },
            {
               "arguments": [
                  {
                    "name": "value",
                    "nativeSrc": "3704:5:1",
                    "nodeType": "Yulldentifier",
                    "src": "3704:5:1"
                 }
               ],
               "functionName": {
                  "name": "cleanup_t_uint256",
                  "nativeSrc": "3686:17:1",
```

```
"nodeType": "Yulldentifier",
                  "src": "3686:17:1"
               },
               "nativeSrc": "3686:24:1",
               "nodeType": "YulFunctionCall",\\
               "src": "3686:24:1"
            }
         ],
          "functionName": {
            "name": "mstore",
            "nativeSrc": "3674:6:1",
            "nodeType": "Yulldentifier",
            "src": "3674:6:1"
          },
          "nativeSrc": "3674:37:1",
          "nodeType": "YulFunctionCall",
          "src": "3674:37:1"
       },
       "nativeSrc": "3674:37:1",
       "nodeType": "YulExpressionStatement",
       "src": "3674:37:1"
     }
  ]
},
"name": "abi_encode_t_uint256_to_t_uint256",
"nativeSrc": "3609:108:1",
```

```
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "3652:5:1",
     "nodeType": "YulTypedName",
     "src": "3652:5:1",
     "type": ""
  },
  {
     "name": "pos",
     "nativeSrc": "3659:3:1",
     "nodeType": "YulTypedName",
     "src": "3659:3:1",
     "type": ""
  }
],
"src": "3609:108:1"
"body": {
  "nativeSrc": "3915:411:1",
  "nodeType": "YulBlock",
  "src": "3915:411:1",
  "statements": [
     {
```

},

{

```
"nativeSrc": "3925:26:1",
"nodeType": "YulVariableDeclaration",
"src": "3925:26:1",
"value": {
  "arguments": [
     {
       "name": "pos",
       "nativeSrc": "3941:3:1",
       "nodeType": "Yulldentifier",
       "src": "3941:3:1"
     },
     {
       "kind": "number",
       "nativeSrc": "3946:4:1",
       "nodeType": "YulLiteral",
       "src": "3946:4:1",
       "type": "",
       "value": "0x40"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "3937:3:1",
     "nodeType": "Yulldentifier",
     "src": "3937:3:1"
  },
```

```
"nativeSrc": "3937:14:1",
     "nodeType": "YulFunctionCall",
     "src": "3937:14:1"
  },
  "variables": [
     {
       "name": "tail",
       "nativeSrc": "3929:4:1",
       "nodeType": "YulTypedName",
       "src": "3929:4:1",
       "type": ""
     }
  ]
},
{
  "nativeSrc": "3961:174:1",
  "nodeType": "YulBlock",
  "src": "3961:174:1",
  "statements": [
     {
       "nativeSrc": "4006:43:1",
        "nodeType": "YulVariableDeclaration",
       "src": "4006:43:1",
        "value": {
          "arguments": [
             {
```

```
"arguments": [
  {
     "name": "value",
     "nativeSrc": "4036:5:1",
     "nodeType": "Yulldentifier",
     "src": "4036:5:1"
  },
  {
     "kind": "number",
     "nativeSrc": "4043:4:1",
     "nodeType": "YulLiteral",
     "src": "4043:4:1",
     "type": "",
     "value": "0x00"
  }
],
"functionName": {
  "name": "add",
  "nativeSrc": "4032:3:1",
  "nodeType": "Yulldentifier",
  "src": "4032:3:1"
},
"nativeSrc": "4032:16:1",
"nodeType": "YulFunctionCall",
"src": "4032:16:1"
```

}

```
],
     "functionName": {
       "name": "mload",
       "nativeSrc": "4026:5:1",
       "nodeType": "Yulldentifier",
       "src": "4026:5:1"
     },
     "nativeSrc": "4026:23:1",
     "nodeType": "YulFunctionCall",
     "src": "4026:23:1"
  },
  "variables": [
     {
       "name": "memberValue0",
       "nativeSrc": "4010:12:1",
       "nodeType": "YulTypedName",
       "src": "4010:12:1",
       "type": ""
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "memberValue0",
```

```
"nativeSrc": "4096:12:1",
  "nodeType": "Yulldentifier",
  "src": "4096:12:1"
},
{
  "arguments": [
     {
        "name": "pos",
        "nativeSrc": "4114:3:1",
        "nodeType": "Yulldentifier",
        "src": "4114:3:1"
     },
     {
        "kind": "number",
        "nativeSrc": "4119:4:1",
        "nodeType": "YulLiteral",
        "src": "4119:4:1",
        "type": "",
        "value": "0x00"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "4110:3:1",
     "nodeType": "Yulldentifier",
     "src": "4110:3:1"
```

```
},
               "nativeSrc": "4110:14:1",
               "nodeType": "YulFunctionCall",
               "src": "4110:14:1"
            }
          ],
          "functionName": {
            "name": "abi_encode_t_uint256_to_t_uint256",
            "nativeSrc": "4062:33:1",
            "nodeType": "Yulldentifier",
            "src": "4062:33:1"
          },
          "nativeSrc": "4062:63:1",
          "nodeType": "YulFunctionCall",
          "src": "4062:63:1"
       },
       "nativeSrc": "4062:63:1",
       "nodeType": "YulExpressionStatement",
       "src": "4062:63:1"
     }
  ]
},
{
  "nativeSrc": "4145:174:1",
  "nodeType": "YulBlock",
  "src": "4145:174:1",
```

```
"statements": [
  {
     "nativeSrc": "4190:43:1",
     "nodeType": "YulVariableDeclaration",
     "src": "4190:43:1",
     "value": {
       "arguments": [
          {
            "arguments": [
               {
                  "name": "value",
                  "nativeSrc": "4220:5:1",
                  "nodeType": "Yulldentifier",
                  "src": "4220:5:1"
               },
               {
                  "kind": "number",
                  "nativeSrc": "4227:4:1",
                  "nodeType": "YulLiteral",
                  "src": "4227:4:1",
                 "type": "",
                  "value": "0x20"
               }
            ],
            "functionName": {
               "name": "add",
```

```
"nativeSrc": "4216:3:1",
          "nodeType": "Yulldentifier",
          "src": "4216:3:1"
       },
       "nativeSrc": "4216:16:1",
       "nodeType": "YulFunctionCall",
       "src": "4216:16:1"
    }
  ],
  "functionName": {
     "name": "mload",
     "nativeSrc": "4210:5:1",
     "nodeType": "Yulldentifier",
     "src": "4210:5:1"
  },
  "nativeSrc": "4210:23:1",
  "nodeType": "YulFunctionCall",
  "src": "4210:23:1"
},
"variables": [
  {
     "name": "memberValue0",
     "nativeSrc": "4194:12:1",
     "nodeType": "YulTypedName",
     "src": "4194:12:1",
     "type": ""
```

```
}
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "memberValue0",
          "nativeSrc": "4280:12:1",
          "nodeType": "Yulldentifier",
          "src": "4280:12:1"
       },
        {
          "arguments": [
            {
               "name": "pos",
               "nativeSrc": "4298:3:1",
               "nodeType": "Yulldentifier",
               "src": "4298:3:1"
            },
             {
               "kind": "number",
               "nativeSrc": "4303:4:1",
               "nodeType": "YulLiteral",
               "src": "4303:4:1",
               "type": "",
```

```
}
       ],
        "functionName": {
          "name": "add",
          "nativeSrc": "4294:3:1",
          "nodeType": "Yulldentifier",
          "src": "4294:3:1"
       },
       "nativeSrc": "4294:14:1",
        "nodeType": "YulFunctionCall",
       "src": "4294:14:1"
     }
  ],
  "functionName": {
     "name": "abi_encode_t_uint256_to_t_uint256",
     "nativeSrc": "4246:33:1",
     "nodeType": "Yulldentifier",
     "src": "4246:33:1"
  },
  "nativeSrc": "4246:63:1",
  "nodeType": "YulFunctionCall",
  "src": "4246:63:1"
},
"nativeSrc": "4246:63:1",
"nodeType": "YulExpressionStatement",
```

"value": "0x20"

```
}
                             ]
                           }
                        ]
                      },
                                                                                           "name":
"abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack",
                      "nativeSrc": "3807:519:1",
                      "nodeType": "YulFunctionDefinition",
                      "parameters": [
                        {
                           "name": "value",
                           "nativeSrc": "3902:5:1",
                           "nodeType": "YulTypedName",
                           "src": "3902:5:1",
                           "type": ""
                        },
                        {
                           "name": "pos",
                           "nativeSrc": "3909:3:1",
                           "nodeType": "YulTypedName",
                           "src": "3909:3:1",
                           "type": ""
                        }
                     ],
```

"src": "4246:63:1"

```
"src": "3807:519:1"
},
{
  "body": {
     "nativeSrc": "4472:166:1",
     "nodeType": "YulBlock",
     "src": "4472:166:1",
     "statements": [
       {
          "nativeSrc": "4482:26:1",
          "nodeType": "YulAssignment",
          "src": "4482:26:1",
          "value": {
             "arguments": [
               {
                  "name": "headStart",
                  "nativeSrc": "4494:9:1",
                  "nodeType": "Yulldentifier",
                  "src": "4494:9:1"
               },
               {
                  "kind": "number",
                  "nativeSrc": "4505:2:1",
                  "nodeType": "YulLiteral",
                  "src": "4505:2:1",
                  "type": "",
```

```
"value": "64"
       }
     ],
     "functionName": {
        "name": "add",
        "nativeSrc": "4490:3:1",
        "nodeType": "Yulldentifier",
        "src": "4490:3:1"
     },
     "nativeSrc": "4490:18:1",
     "nodeType": "YulFunctionCall",
     "src": "4490:18:1"
  },
  "variableNames": [
     {
        "name": "tail",
        "nativeSrc": "4482:4:1",
        "nodeType": "Yulldentifier",
        "src": "4482:4:1"
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
```

```
"name": "value0",
  "nativeSrc": "4604:6:1",
  "nodeType": "Yulldentifier",
  "src": "4604:6:1"
},
{
  "arguments": [
     {
        "name": "headStart",
        "nativeSrc": "4617:9:1",
        "nodeType": "Yulldentifier",
        "src": "4617:9:1"
     },
     {
        "kind": "number",
        "nativeSrc": "4628:1:1",
        "nodeType": "YulLiteral",
        "src": "4628:1:1",
        "type": "",
        "value": "0"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "4613:3:1",
     "nodeType": "Yulldentifier",
```

```
"src": "4613:3:1"
                                    },
                                    "nativeSrc": "4613:17:1",
                                     "nodeType": "YulFunctionCall",
                                    "src": "4613:17:1"
                                  }
                               ],
                                "functionName": {
                                                                                          "name":
"abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack",
                                  "nativeSrc": "4518:85:1",
                                  "nodeType": "Yulldentifier",
                                  "src": "4518:85:1"
                               },
                                "nativeSrc": "4518:113:1",
                                "nodeType": "YulFunctionCall",
                                "src": "4518:113:1"
                             },
                             "nativeSrc": "4518:113:1",
                             "nodeType": "YulExpressionStatement",
                             "src": "4518:113:1"
                          }
                        ]
                      },
                                                                                          "name":
"abi_encode_tuple_t_struct$_Ledger_$7_memory_ptr__to_t_struct$_Ledger_$7_memory_ptr__fro
```

```
mStack_reversed",
```

```
"nativeSrc": "4332:306:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "headStart",
     "nativeSrc": "4444:9:1",
     "nodeType": "YulTypedName",
     "src": "4444:9:1",
     "type": ""
  },
  {
     "name": "value0",
     "nativeSrc": "4456:6:1",
     "nodeType": "YulTypedName",
     "src": "4456:6:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "tail",
     "nativeSrc": "4467:4:1",
     "nodeType": "YulTypedName",
     "src": "4467:4:1",
     "type": ""
```

```
}
  ],
  "src": "4332:306:1"
},
{
  "body": {
     "nativeSrc": "4740:73:1",
     "nodeType": "YulBlock",
     "src": "4740:73:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "name": "pos",
                  "nativeSrc": "4757:3:1",
                  "nodeType": "Yulldentifier",
                  "src": "4757:3:1"
               },
               {
                  "name": "length",
                  "nativeSrc": "4762:6:1",
                  "nodeType": "Yulldentifier",
                  "src": "4762:6:1"
               }
             ],
```

```
"functionName": {
        "name": "mstore",
        "nativeSrc": "4750:6:1",
        "nodeType": "Yulldentifier",
       "src": "4750:6:1"
     },
     "nativeSrc": "4750:19:1",
     "nodeType": "YulFunctionCall",
     "src": "4750:19:1"
  },
  "nativeSrc": "4750:19:1",
  "nodeType": "YulExpressionStatement",
  "src": "4750:19:1"
},
{
  "nativeSrc": "4778:29:1",
  "nodeType": "YulAssignment",
  "src": "4778:29:1",
  "value": {
     "arguments": [
       {
          "name": "pos",
          "nativeSrc": "4797:3:1",
          "nodeType": "Yulldentifier",
          "src": "4797:3:1"
       },
```

```
{
       "kind": "number",
       "nativeSrc": "4802:4:1",
       "nodeType": "YulLiteral",
       "src": "4802:4:1",
       "type": "",
       "value": "0x20"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "4793:3:1",
     "nodeType": "Yulldentifier",
     "src": "4793:3:1"
  },
  "nativeSrc": "4793:14:1",
  "nodeType": "YulFunctionCall",
  "src": "4793:14:1"
},
"variableNames": [
  {
     "name": "updated_pos",
     "nativeSrc": "4778:11:1",
     "nodeType": "Yulldentifier",
     "src": "4778:11:1"
  }
```

```
]
    }
  ]
},
"name": "array_storeLengthForEncoding_t_string_memory_ptr_fromStack",
"nativeSrc": "4644:169:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
    "name": "pos",
    "nativeSrc": "4712:3:1",
    "nodeType": "YulTypedName",
    "src": "4712:3:1",
    "type": ""
  },
  {
    "name": "length",
    "nativeSrc": "4717:6:1",
    "nodeType": "YulTypedName",
    "src": "4717:6:1",
    "type": ""
  }
],
"returnVariables": [
  {
    "name": "updated_pos",
```

```
"nativeSrc": "4728:11:1",
       "nodeType": "YulTypedName",
       "src": "4728:11:1",
       "type": ""
     }
  ],
  "src": "4644:169:1"
},
{
  "body": {
     "nativeSrc": "4925:73:1",
     "nodeType": "YulBlock",
     "src": "4925:73:1",
     "statements": [
       {
          "expression": {
            "arguments": [
               {
                  "arguments": [
                    {
                       "name": "memPtr",
                       "nativeSrc": "4947:6:1",
                       "nodeType": "Yulldentifier",
                       "src": "4947:6:1"
                    },
```

```
"kind": "number",
                                           "nativeSrc": "4955:1:1",
                                           "nodeType": "YulLiteral",
                                           "src": "4955:1:1",
                                           "type": "",
                                           "value": "0"
                                        }
                                      ],
                                      "functionName": {
                                        "name": "add",
                                        "nativeSrc": "4943:3:1",
                                        "nodeType": "Yulldentifier",
                                        "src": "4943:3:1"
                                      },
                                      "nativeSrc": "4943:14:1",
                                      "nodeType": "YulFunctionCall",
                                      "src": "4943:14:1"
                                   },
                                   {
                                                                                         "hexValue":
"496e73756666696369656e74206d61696e6e65742062616c616e63652e",
                                      "kind": "string",
                                      "nativeSrc": "4959:31:1",
                                      "nodeType": "YulLiteral",
                                      "src": "4959:31:1",
                                      "type": "",
```

```
}
                                ],
                                "functionName": {
                                  "name": "mstore",
                                  "nativeSrc": "4936:6:1",
                                  "nodeType": "Yulldentifier",
                                  "src": "4936:6:1"
                                },
                                "nativeSrc": "4936:55:1",
                                "nodeType": "YulFunctionCall",
                                "src": "4936:55:1"
                             },
                             "nativeSrc": "4936:55:1",
                             "nodeType": "YulExpressionStatement",
                             "src": "4936:55:1"
                           }
                        ]
                      },
                                                                                           "name":
"store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
45",
                      "nativeSrc": "4819:179:1",
                      "nodeType": "YulFunctionDefinition",
                      "parameters": [
                        {
```

"value": "Insufficient mainnet balance."

```
"name": "memPtr",
       "nativeSrc": "4917:6:1",
       "nodeType": "YulTypedName",
       "src": "4917:6:1",
       "type": ""
     }
  ],
  "src": "4819:179:1"
},
{
  "body": {
     "nativeSrc": "5150:220:1",
     "nodeType": "YulBlock",
     "src": "5150:220:1",
     "statements": [
       {
          "nativeSrc": "5160:74:1",
          "nodeType": "YulAssignment",
          "src": "5160:74:1",
          "value": {
            "arguments": [
               {
                 "name": "pos",
                 "nativeSrc": "5226:3:1",
                 "nodeType": "Yulldentifier",
                  "src": "5226:3:1"
```

```
},
                                    {
                                      "kind": "number",
                                      "nativeSrc": "5231:2:1",
                                      "nodeType": "YulLiteral",
                                      "src": "5231:2:1",
                                      "type": "",
                                      "value": "29"
                                    }
                                 ],
                                 "functionName": {
                                                                                               "name":
"array\_storeLengthForEncoding\_t\_string\_memory\_ptr\_fromStack",
                                    "nativeSrc": "5167:58:1",
                                    "nodeType": "Yulldentifier",
                                    "src": "5167:58:1"
                                 },
                                 "nativeSrc": "5167:67:1",
                                 "nodeType": "YulFunctionCall",
                                 "src": "5167:67:1"
                               },
                               "variableNames": [
                                 {
                                    "name": "pos",
                                    "nativeSrc": "5160:3:1",
                                    "nodeType": "Yulldentifier",
```

```
}
                              ]
                           },
                           {
                              "expression": {
                                "arguments": [
                                   {
                                     "name": "pos",
                                     "nativeSrc": "5332:3:1",
                                     "nodeType": "Yulldentifier",
                                     "src": "5332:3:1"
                                   }
                                ],
                                "functionName": {
                                                                                             "name":
"store\_literal\_in\_memory\_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
45",
                                   "nativeSrc": "5243:88:1",
                                   "nodeType": "Yulldentifier",
                                   "src": "5243:88:1"
                                },
                                "nativeSrc": "5243:93:1",
                                "nodeType": "YulFunctionCall",
                                "src": "5243:93:1"
                              },
```

"src": "5160:3:1"

```
"nativeSrc": "5243:93:1",
  "nodeType": "YulExpressionStatement",
  "src": "5243:93:1"
},
{
  "nativeSrc": "5345:19:1",
  "nodeType": "YulAssignment",
  "src": "5345:19:1",
  "value": {
     "arguments": [
       {
          "name": "pos",
          "nativeSrc": "5356:3:1",
          "nodeType": "Yulldentifier",
          "src": "5356:3:1"
       },
       {
          "kind": "number",
          "nativeSrc": "5361:2:1",
          "nodeType": "YulLiteral",
          "src": "5361:2:1",
          "type": "",
          "value": "32"
       }
     ],
     "functionName": {
```

```
"name": "add",
                                   "nativeSrc": "5352:3:1",
                                   "nodeType": "Yulldentifier",
                                   "src": "5352:3:1"
                                },
                                "nativeSrc": "5352:12:1",
                                "nodeType": "YulFunctionCall",
                                "src": "5352:12:1"
                             },
                              "variableNames": [
                                {
                                   "name": "end",
                                   "nativeSrc": "5345:3:1",
                                   "nodeType": "Yulldentifier",
                                   "src": "5345:3:1"
                                }
                             ]
                           }
                        1
                      },
                                                                                            "name":
"abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45_to_t_string_memory_ptr_fromStack",
                      "nativeSrc": "5004:366:1",
                      "nodeType": "YulFunctionDefinition",
                      "parameters": [
```

```
"name": "pos",
       "nativeSrc": "5138:3:1",
       "nodeType": "YulTypedName",
       "src": "5138:3:1",
       "type": ""
     }
  ],
  "returnVariables": [
     {
       "name": "end",
       "nativeSrc": "5146:3:1",
       "nodeType": "YulTypedName",
       "src": "5146:3:1",
       "type": ""
     }
  ],
  "src": "5004:366:1"
},
  "body": {
     "nativeSrc": "5547:248:1",
     "nodeType": "YulBlock",
     "src": "5547:248:1",
     "statements": [
       {
```

{

```
"nativeSrc": "5557:26:1",
"nodeType": "YulAssignment",
"src": "5557:26:1",
"value": {
  "arguments": [
     {
       "name": "headStart",
       "nativeSrc": "5569:9:1",
       "nodeType": "Yulldentifier",
       "src": "5569:9:1"
     },
     {
       "kind": "number",
       "nativeSrc": "5580:2:1",
       "nodeType": "YulLiteral",
       "src": "5580:2:1",
       "type": "",
       "value": "32"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "5565:3:1",
     "nodeType": "Yulldentifier",
     "src": "5565:3:1"
  },
```

```
"nativeSrc": "5565:18:1",
     "nodeType": "YulFunctionCall",
     "src": "5565:18:1"
  },
  "variableNames": [
     {
        "name": "tail",
        "nativeSrc": "5557:4:1",
        "nodeType": "Yulldentifier",
        "src": "5557:4:1"
    }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "arguments": [
             {
               "name": "headStart",
               "nativeSrc": "5604:9:1",
               "nodeType": "Yulldentifier",
               "src": "5604:9:1"
             },
               "kind": "number",
```

```
"nativeSrc": "5615:1:1",
        "nodeType": "YulLiteral",
        "src": "5615:1:1",
        "type": "",
        "value": "0"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "5600:3:1",
     "nodeType": "Yulldentifier",
     "src": "5600:3:1"
  },
  "nativeSrc": "5600:17:1",
  "nodeType": "YulFunctionCall",
  "src": "5600:17:1"
},
{
  "arguments": [
     {
        "name": "tail",
        "nativeSrc": "5623:4:1",
        "nodeType": "Yulldentifier",
        "src": "5623:4:1"
     },
```

```
"name": "headStart",
          "nativeSrc": "5629:9:1",
          "nodeType": "Yulldentifier",
          "src": "5629:9:1"
       }
     ],
     "functionName": {
       "name": "sub",
       "nativeSrc": "5619:3:1",
       "nodeType": "Yulldentifier",
       "src": "5619:3:1"
     },
     "nativeSrc": "5619:20:1",
     "nodeType": "YulFunctionCall",
     "src": "5619:20:1"
  }
"functionName": {
  "name": "mstore",
  "nativeSrc": "5593:6:1",
  "nodeType": "Yulldentifier",
  "src": "5593:6:1"
},
"nativeSrc": "5593:47:1",
"nodeType": "YulFunctionCall",
"src": "5593:47:1"
```

],

```
"nativeSrc": "5593:47:1",
                              "nodeType": "YulExpressionStatement",
                              "src": "5593:47:1"
                           },
                           {
                              "nativeSrc": "5649:139:1",
                              "nodeType": "YulAssignment",
                              "src": "5649:139:1",
                              "value": {
                                "arguments": [
                                   {
                                     "name": "tail",
                                      "nativeSrc": "5783:4:1",
                                     "nodeType": "Yulldentifier",
                                     "src": "5783:4:1"
                                   }
                                ],
                                "functionName": {
                                                                                            "name":
"abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45\_to\_t\_string\_memory\_ptr\_fromStack",
                                   "nativeSrc": "5657:124:1",
                                   "nodeType": "Yulldentifier",
                                   "src": "5657:124:1"
                                },
```

},

```
"nodeType": "YulFunctionCall",
                                "src": "5657:131:1"
                             },
                             "variableNames": [
                                {
                                  "name": "tail",
                                  "nativeSrc": "5649:4:1",
                                  "nodeType": "Yulldentifier",
                                  "src": "5649:4:1"
                               }
                             ]
                           }
                        ]
                      },
                                                                                           "name":
"abi_encode_tuple_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc11892297711
67008cf45__to_t_string_memory_ptr__fromStack_reversed",
                      "nativeSrc": "5376:419:1",
                      "nodeType": "YulFunctionDefinition",
                      "parameters": [
                        {
                           "name": "headStart",
                           "nativeSrc": "5527:9:1",
                           "nodeType": "YulTypedName",
                           "src": "5527:9:1",
```

"nativeSrc": "5657:131:1",

```
"type": ""
     }
  ],
  "returnVariables": [
     {
       "name": "tail",
       "nativeSrc": "5542:4:1",
       "nodeType": "YulTypedName",
       "src": "5542:4:1",
       "type": ""
     }
  ],
  "src": "5376:419:1"
},
{
  "body": {
     "nativeSrc": "5829:152:1",
     "nodeType": "YulBlock",
     "src": "5829:152:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "kind": "number",
                  "nativeSrc": "5846:1:1",
```

```
"src": "5846:1:1",
                                     "type": "",
                                     "value": "0"
                                  },
                                  {
                                     "kind": "number",
                                     "nativeSrc": "5849:77:1",
                                     "nodeType": "YulLiteral",
                                     "src": "5849:77:1",
                                     "type": "",
                                                                                            "value":
"35408467139433450592217433187231851964531694900788300625387963629091585785856"
                                  }
                                ],
                                "functionName": {
                                   "name": "mstore",
                                   "nativeSrc": "5839:6:1",
                                   "nodeType": "Yulldentifier",
                                   "src": "5839:6:1"
                                },
                                "nativeSrc": "5839:88:1",
                                "nodeType": "YulFunctionCall",
                                "src": "5839:88:1"
                             },
                             "nativeSrc": "5839:88:1",
```

"nodeType": "YulLiteral",

```
"nodeType": "YulExpressionStatement",
  "src": "5839:88:1"
},
{
  "expression": {
     "arguments": [
       {
          "kind": "number",
          "nativeSrc": "5943:1:1",
          "nodeType": "YulLiteral",
          "src": "5943:1:1",
          "type": "",
          "value": "4"
       },
       {
          "kind": "number",
          "nativeSrc": "5946:4:1",
          "nodeType": "YulLiteral",
          "src": "5946:4:1",
          "type": "",
          "value": "0x11"
       }
     ],
     "functionName": {
       "name": "mstore",
       "nativeSrc": "5936:6:1",
```

```
"nodeType": "Yulldentifier",
       "src": "5936:6:1"
     },
     "nativeSrc": "5936:15:1",
     "nodeType": "YulFunctionCall",
     "src": "5936:15:1"
  },
  "nativeSrc": "5936:15:1",
  "nodeType": "YulExpressionStatement",
  "src": "5936:15:1"
},
{
  "expression": {
     "arguments": [
       {
          "kind": "number",
          "nativeSrc": "5967:1:1",
          "nodeType": "YulLiteral",
          "src": "5967:1:1",
          "type": "",
          "value": "0"
       },
       {
          "kind": "number",
          "nativeSrc": "5970:4:1",
          "nodeType": "YulLiteral",
```

```
"src": "5970:4:1",
                  "type": "",
                  "value": "0x24"
               }
            ],
             "functionName": {
               "name": "revert",
               "nativeSrc": "5960:6:1",
               "nodeType": "Yulldentifier",
               "src": "5960:6:1"
            },
             "nativeSrc": "5960:15:1",
             "nodeType": "YulFunctionCall",
             "src": "5960:15:1"
          },
          "nativeSrc": "5960:15:1",
          "nodeType": "YulExpressionStatement",
          "src": "5960:15:1"
       }
     1
  },
  "name": "panic_error_0x11",
  "nativeSrc": "5801:180:1",
  "nodeType": "YulFunctionDefinition",
  "src": "5801:180:1"
},
```

```
"body": {
  "nativeSrc": "6032:149:1",
  "nodeType": "YulBlock",
  "src": "6032:149:1",
  "statements": [
    {
       "nativeSrc": "6042:25:1",
       "nodeType": "YulAssignment",
       "src": "6042:25:1",
       "value": {
          "arguments": [
            {
               "name": "x",
               "nativeSrc": "6065:1:1",
               "nodeType": "Yulldentifier",
               "src": "6065:1:1"
            }
          ],
          "functionName": {
            "name": "cleanup_t_uint256",
            "nativeSrc": "6047:17:1",
             "nodeType": "Yulldentifier",
             "src": "6047:17:1"
          },
          "nativeSrc": "6047:20:1",
```

{

```
"nodeType": "YulFunctionCall",
     "src": "6047:20:1"
  },
  "variableNames": [
     {
       "name": "x",
       "nativeSrc": "6042:1:1",
       "nodeType": "Yulldentifier",
       "src": "6042:1:1"
     }
  ]
},
{
  "nativeSrc": "6076:25:1",
  "nodeType": "YulAssignment",
  "src": "6076:25:1",
  "value": {
     "arguments": [
       {
          "name": "y",
          "nativeSrc": "6099:1:1",
          "nodeType": "Yulldentifier",
          "src": "6099:1:1"
       }
     ],
     "functionName": {
```

```
"name": "cleanup_t_uint256",
     "nativeSrc": "6081:17:1",
     "nodeType": "Yulldentifier",
     "src": "6081:17:1"
  },
  "nativeSrc": "6081:20:1",
  "nodeType": "YulFunctionCall",
  "src": "6081:20:1"
},
"variableNames": [
  {
     "name": "y",
     "nativeSrc": "6076:1:1",
     "nodeType": "Yulldentifier",
     "src": "6076:1:1"
  }
]
"nativeSrc": "6110:17:1",
"nodeType": "YulAssignment",
"src": "6110:17:1",
"value": {
  "arguments": [
     {
       "name": "x",
```

},

{

```
"nativeSrc": "6122:1:1",
       "nodeType": "Yulldentifier",
       "src": "6122:1:1"
     },
     {
       "name": "y",
       "nativeSrc": "6125:1:1",
       "nodeType": "Yulldentifier",
       "src": "6125:1:1"
     }
  ],
  "functionName": {
     "name": "sub",
     "nativeSrc": "6118:3:1",
     "nodeType": "Yulldentifier",
     "src": "6118:3:1"
  },
  "nativeSrc": "6118:9:1",
  "nodeType": "YulFunctionCall",
  "src": "6118:9:1"
},
"variableNames": [
  {
     "name": "diff",
     "nativeSrc": "6110:4:1",
     "nodeType": "Yulldentifier",
```

```
"src": "6110:4:1"
    }
  ]
},
{
  "body": {
     "nativeSrc": "6152:22:1",
     "nodeType": "YulBlock",
     "src": "6152:22:1",
     "statements": [
       {
          "expression": {
             "arguments": [],
             "functionName": {
               "name": "panic_error_0x11",
               "nativeSrc": "6154:16:1",
               "nodeType": "Yulldentifier",
               "src": "6154:16:1"
            },
             "nativeSrc": "6154:18:1",
             "nodeType": "YulFunctionCall",
             "src": "6154:18:1"
          },
          "nativeSrc": "6154:18:1",
          "nodeType": "YulExpressionStatement",
          "src": "6154:18:1"
```

```
}
  ]
},
"condition": {
  "arguments": [
    {
       "name": "diff",
       "nativeSrc": "6143:4:1",
       "nodeType": "Yulldentifier",
       "src": "6143:4:1"
    },
     {
       "name": "x",
       "nativeSrc": "6149:1:1",
       "nodeType": "Yulldentifier",
       "src": "6149:1:1"
    }
  ],
  "functionName": {
     "name": "gt",
     "nativeSrc": "6140:2:1",
     "nodeType": "Yulldentifier",
     "src": "6140:2:1"
  },
  "nativeSrc": "6140:11:1",
  "nodeType": "YulFunctionCall",
```

```
"src": "6140:11:1"
       },
       "nativeSrc": "6137:37:1",
       "nodeType": "Yullf",
       "src": "6137:37:1"
     }
  ]
},
"name": "checked_sub_t_uint256",
"nativeSrc": "5987:194:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "x",
     "nativeSrc": "6018:1:1",
     "nodeType": "YulTypedName",
     "src": "6018:1:1",
     "type": ""
  },
  {
     "name": "y",
     "nativeSrc": "6021:1:1",
     "nodeType": "YulTypedName",
     "src": "6021:1:1",
     "type": ""
  }
```

```
],
  "returnVariables": [
     {
       "name": "diff",
       "nativeSrc": "6027:4:1",
       "nodeType": "YulTypedName",
       "src": "6027:4:1",
       "type": ""
     }
  ],
  "src": "5987:194:1"
},
{
  "body": {
     "nativeSrc": "6231:147:1",
     "nodeType": "YulBlock",
     "src": "6231:147:1",
     "statements": [
       {
          "nativeSrc": "6241:25:1",
          "nodeType": "YulAssignment",
          "src": "6241:25:1",
          "value": {
             "arguments": [
               {
                  "name": "x",
```

```
"nativeSrc": "6264:1:1",
       "nodeType": "Yulldentifier",
       "src": "6264:1:1"
    }
  ],
  "functionName": {
     "name": "cleanup_t_uint256",
     "nativeSrc": "6246:17:1",
     "nodeType": "Yulldentifier",
     "src": "6246:17:1"
  },
  "nativeSrc": "6246:20:1",
  "nodeType": "YulFunctionCall",
  "src": "6246:20:1"
},
"variableNames": [
  {
     "name": "x",
     "nativeSrc": "6241:1:1",
     "nodeType": "Yulldentifier",
     "src": "6241:1:1"
  }
]
"nativeSrc": "6275:25:1",
```

},

{

```
"nodeType": "YulAssignment",
"src": "6275:25:1",
"value": {
  "arguments": [
     {
       "name": "y",
       "nativeSrc": "6298:1:1",
       "nodeType": "Yulldentifier",
       "src": "6298:1:1"
     }
  ],
  "functionName": {
     "name": "cleanup_t_uint256",
     "nativeSrc": "6280:17:1",
     "nodeType": "Yulldentifier",
     "src": "6280:17:1"
  },
  "nativeSrc": "6280:20:1",
  "nodeType": "YulFunctionCall",
  "src": "6280:20:1"
},
"variableNames": [
  {
     "name": "y",
     "nativeSrc": "6275:1:1",
     "nodeType": "Yulldentifier",
```

```
"src": "6275:1:1"
    }
  ]
},
{
  "nativeSrc": "6309:16:1",
  "nodeType": "YulAssignment",
  "src": "6309:16:1",
  "value": {
     "arguments": [
       {
          "name": "x",
          "nativeSrc": "6320:1:1",
          "nodeType": "Yulldentifier",
          "src": "6320:1:1"
       },
       {
          "name": "y",
          "nativeSrc": "6323:1:1",
          "nodeType": "Yulldentifier",
          "src": "6323:1:1"
       }
     ],
     "functionName": {
       "name": "add",
        "nativeSrc": "6316:3:1",
```

```
"nodeType": "Yulldentifier",
        "src": "6316:3:1"
     },
     "nativeSrc": "6316:9:1",
     "nodeType": "YulFunctionCall",
     "src": "6316:9:1"
  },
  "variableNames": [
     {
        "name": "sum",
        "nativeSrc": "6309:3:1",
        "nodeType": "Yulldentifier",
        "src": "6309:3:1"
     }
  ]
},
{
  "body": {
     "nativeSrc": "6349:22:1",
     "nodeType": "YulBlock",
     "src": "6349:22:1",
     "statements": [
       {
          "expression": {
             "arguments": [],
             "functionName": {
```

```
"name": "panic_error_0x11",
             "nativeSrc": "6351:16:1",
             "nodeType": "Yulldentifier",
             "src": "6351:16:1"
          },
          "nativeSrc": "6351:18:1",
          "nodeType": "YulFunctionCall",
          "src": "6351:18:1"
       },
       "nativeSrc": "6351:18:1",
       "nodeType": "YulExpressionStatement",
       "src": "6351:18:1"
    }
  ]
},
"condition": {
  "arguments": [
     {
       "name": "x",
       "nativeSrc": "6341:1:1",
       "nodeType": "Yulldentifier",
       "src": "6341:1:1"
     },
     {
       "name": "sum",
       "nativeSrc": "6344:3:1",
```

```
"nodeType": "Yulldentifier",
               "src": "6344:3:1"
            }
          ],
          "functionName": {
            "name": "gt",
            "nativeSrc": "6338:2:1",
            "nodeType": "Yulldentifier",
            "src": "6338:2:1"
          },
          "nativeSrc": "6338:10:1",
          "nodeType": "YulFunctionCall",
          "src": "6338:10:1"
       },
       "nativeSrc": "6335:36:1",
       "nodeType": "Yullf",
       "src": "6335:36:1"
     }
  ]
},
"name": "checked_add_t_uint256",
"nativeSrc": "6187:191:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "x",
```

```
"nativeSrc": "6218:1:1",
            "nodeType": "YulTypedName",
            "src": "6218:1:1",
            "type": ""
          },
          {
            "name": "y",
            "nativeSrc": "6221:1:1",
            "nodeType": "YulTypedName",
            "src": "6221:1:1",
            "type": ""
          }
       ],
       "returnVariables": [
          {
            "name": "sum",
            "nativeSrc": "6227:3:1",
            "nodeType": "YulTypedName",
            "src": "6227:3:1",
            "type": ""
          }
       ],
       "src": "6187:191:1"
    }
  ]
},
```

```
"contents": "{\n\n function allocate_unbounded() -> memPtr {\n
                                                                                   memPtr :=
mload(64)\n
                                              }\n\n
                                                                                      function
revert error dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b() {\n
            revert(0,
                           0)\n
                                                        n/n
                                                                                      function
revert_error_c1322bf8034eace5e0b5c7295db60986aa89aae5e0ea0873e4689e076861a5db() {\n
                      function cleanup t uint160(value) -> cleaned {\n
 revert(0, 0)\n }\n
                                                                         cleaned := and(value,
function cleanup_t_address(value) -> cleaned {\n
                               }\n\n
cleaned := cleanup t uint160(value)\n }\n\n function validator revert t address(value) {\n
                                                                                            if
iszero(eg(value, cleanup t address(value))) { revert(0, 0) }\n
                                                                         n/n
                                                                                      function
abi decode t address(offset, end) -> value {\n
                                                       value := calldataload(offset)\n
validator revert t address(value)\n \\n\n function cleanup t uint256(value) -> cleaned {\n
cleaned := value\n
                    }\n\n
                            function validator_revert_t_uint256(value) {\n
                                                                            if iszero(eq(value,
cleanup_t_uint256(value))) { revert(0, 0) }\n }\n\n function abi_decode_t_uint256(offset, end) ->
value {\n
               value := calldataload(offset)\n
                                                  validator revert t uint256(value)\n
                                                                                      n/n
function abi_decode_tuple_t_addresst_uint256(headStart, dataEnd) -> value0, value1 {\n
                                                                                            if
slt(sub(dataEnd,
                                    headStart),
                                                                    64)
                                                                                            {
revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b() \\n\n
                                        value0 := abi decode t address(add(headStart, offset),
   {n}n
                let offset := 0\n\n
                                 \{\n\n
                                                   let offset := 32\n
dataEnd)\n
                   n/n
                                                                                    value1 :=
abi decode t uint256(add(headStart, offset), dataEnd)\n
                                                                  }\n\n
                                                                            }\n\n
                                                                                      function
abi_decode_tuple_t_uint256(headStart, dataEnd) -> value0 {\n
                                                                 if slt(sub(dataEnd, headStart),
32) { revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b()
n/n
          n/n
                       let offset := 0\n\n
                                                value0 := abi_decode_t_uint256(add(headStart,
offset),
         dataEnd)\n
                                                 }\n\n
                                                                   n/n
                                                                                      function
abi_encode_t_address_to_t_address_fromStack(value,
                                                     pos)
                                                            {\n
                                                                                  mstore(pos,
cleanup t address(value))\n
                                                      }\n\n
                                                                                      function
```

```
abi_encode_t_uint256_to_t_uint256_fromStack(value,
                                                     pos)
                                                            {\n
                                                                                   mstore(pos,
cleanup_t_uint256(value))\n
                                                      }\n\n
                                                                                      function
abi_encode_tuple_t_address_t_uint256_t_uint256__to_t_address_t_uint256_t_uint256__fromStack
reversed(headStart, value2, value1, value0) -> tail {\n
                                                            tail := add(headStart, 96)\n\n
abi_encode_t_address_to_t_address_fromStack(value0,
                                                         add(headStart, 0))\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value1,
                                                        add(headStart, 32))\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value2, add(headStart, 64))\n\n
                                                                               n/n
                                                                                      function
abi decode tuple t address(headStart, dataEnd) -> value0 {\n
                                                                 if slt(sub(dataEnd, headStart),
32) { revert error dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b()
n/n
          n/n
                       let offset := 0\n
                                                value0 := abi decode t address(add(headStart,
                                                 n/n
                                                                    n/n
                                                                                      function
offset),
          dataEnd)\n
abi_encode_tuple_t_uint256_t_uint256__to_t_uint256_t_uint256__fromStack_reversed(headStart ,
value1, value0) -> tail {\n
                                               tail :=
                                                       add(headStart, 64)\n\n
abi encode t uint256 to t uint256 fromStack(value0,
                                                        add(headStart, 0))\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value1, add(headStart, 32))\n\n
                                                                               }\n\n
                                                                                      function
abi_encode_tuple_t_uint256__to_t_uint256__fromStack_reversed(headStart, value0) -> tail {\n
tail := add(headStart, 32)\n\n
                                        abi_encode_t_uint256_to_t_uint256_fromStack(value0,
add(headStart, 0))\n\n
                               function abi encode t uint256 to t uint256(value, pos) {\n
                        }\n\n
mstore(pos, cleanup t uint256(value))\n
                                        }\n\n
                                                // struct LiminalFinancialSystem.Ledger -> struct
LiminalFinancialSystem.Ledger\n
                                                                                      function
abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack(va
lue, pos) {\n
                  let tail := add(pos, 0x40)\n\n
                                                   {\n
                                                              // mainnetBalance\n\n
                                                                                            let
memberValue0
                       mload(add(value,
                                            0x00))\n
                  :=
abi_encode_t_uint256_to_t_uint256(memberValue0, add(pos, 0x00))\n
                                                                        }\n\n
                                                                                  {\n
                                                                                            //
testnetBalance\n\n
                                let memberValue0 := mload(add(value, 0x20))\n
abi encode t uint256 to t uint256(memberValue0, add(pos, 0x20))\n
                                                                        }\n\n
                                                                               }\n\n
                                                                                      function
```

abi_encode_tuple_t_struct\$_Ledger_\$7_memory_ptr__to_t_struct\$_Ledger_\$7_memory_ptr__from Stack_reversed(headStart , value0) -> tail {\n tail := add(headStart, 64)\n\n abi_encode_t_struct\$_Ledger_\$7_memory_ptr_to_t_struct\$_Ledger_\$7_memory_ptr_fromStack(va add(headStart. function lue0, $0))\n\n$ }\n\n array_storeLengthForEncoding_t_string_memory_ptr_fromStack(pos, length) -> updated_pos {\n mstore(pos, length)\n updated_pos := add(pos, 0x20)\n n/nfunction store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf 45(memPtr) {\n\n mstore(add(memPtr, 0), \"Insufficient mainnet balance.\")\n\n }\n\n abi encode t stringliteral a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008 cf45 to t string memory ptr fromStack(pos) end {\n pos :=array_storeLengthForEncoding_t_string_memory_ptr_fromStack(pos, 29)\n store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf 45(pos)\n end := add(pos, 32)\n }\n\n function abi encode tuple t stringliteral a79d9bfa525ff020652d7c27b8413c0ac16067f192cc11892297711 67008cf45__to_t_string_memory_ptr__fromStack_reversed(headStart) -> tail {\n tail := add(headStart, 32)\n\n mstore(add(headStart, 0), sub(tail, headStart))\n tail := abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008 cf45_to_t_string_memory_ptr_fromStack(tail)\n\n function panic error 0x11() {\n }\n\n mstore(0, 35408467139433450592217433187231851964531694900788300625387963629091585785856)\n mstore(4, 0x11)\n revert(0, 0x24)\n \n\n function checked sub t uint256(x, y) -> diff {\n $x := cleanup_t_uint256(x)\n$ $y := cleanup_t_uint256(y)\n$ $diff := sub(x, y)\n\n$ if at(diff, x) { panic_error_0x11() }\n\n }\n\n function checked_add_t_uint256(x, y) -> sum {\n x := cleanup_t_uint256(x)\n $y := cleanup_t_uint256(y)\n$ sum := add(x, y)\n\n if gt(x, sum) {

"id": 1,

```
"language": "Yul",

"name": "#utility.yul"

}

],

"immutableReferences": {},

"linkReferences": {},
```

"object":

"608060405234801561000f575f80fd5b5060043610610055575f3560e01c806367844d2b146100595 780639ace38c214610075578063b1e1c370146100a7578063b5c604ff146100d8578063f7cd6af9146 100f6575b5f80fd5b610073600480360381019061006e91906105b5565b610126565b005b61008f60 0480360381019061008a91906105f3565b610424565b60405161009e9392919061063c565b604051 80910390f35b6100c160048036038101906100bc9190610671565b610478565b6040516100cf92919 061069c565b60405180910390f35b6100e0610497565b6040516100ed91906106c3565b604051809 10390f35b610110600480360381019061010b9190610671565b6104a3565b60405161011d9190610 681526020019081526020015f205f015410156101a7576040517f08c379a000000000000000000000 73ffffffffffffffffffffffffffffffff1681526020019081526020015f206001015f8282546102499190610809 183815260200183815250908060018154018082558091505060019003905f5260205f20906003020 15f909190919091505f820151815f015f6101000a81548173fffffffffffffffffffffffffffffffff021916908373f

167fe3e2e5b15dbd2776222deab4cbd7fb2aeeecfd735eed24e9809b2352f3fa2d375f808573ffffffffffffff 405161041892919061069c565b60405180910390a25050565b60018181548110610433575f80fd5b 16908060010154908060020154905083565b5f602052805f5260405f205f91509050805f0154908060 5f82015481526020016001820154815250509050919050565b60405180604001604052805f815260 28565b9050919050565b61056181610547565b811461056b575f80fd5b50565b5f8135905061057c8 1610558565b92915050565b5f819050919050565b61059481610582565b811461059e575f80fd5b50 565b5f813590506105af8161058b565b92915050565b5f80604083850312156105cb576105ca61052 4565b5b5f6105d88582860161056e565b92505060206105e9858286016105a1565b9150509250929 050565b5f6020828403121561060857610607610524565b5b5f610615848285016105a1565b91505 092915050565b61062781610547565b82525050565b61063681610582565b82525050565b5f60608 201905061064f5f83018661061e565b61065c602083018561062d565b610669604083018461062d5 65b949350505050565b5f6020828403121561068657610685610524565b5b5f61069384828501610 56e565b91505092915050565b5f6040820190506106af5f83018561062d565b6106bc602083018461 062d565b9392505050565b5f6020820190506106d65f83018461062d565b92915050565b6106e581 610582565b82525050565b604082015f8201516106ff5f8501826106dc565b5060208201516107126 0208501826106dc565b50505050565b5f60408201905061072b5f8301846106eb565b92915050565 b5f82825260208201905092915050565b7f496e73756666696369656e74206d61696e6e657420626 16c616e63652e0000005f82015250565b5f610775601d83610731565b915061078082610741565b6 02082019050919050565b5f6020820190508181035f8301526107a281610769565b9050919050565

260245ffd5b5f6107e082610582565b91506107eb83610582565b9250828203905081811115610803 576108026107a9565b5b92915050565b5f61081382610582565b915061081e83610582565b925082 8201905080821115610836576108356107a9565b5b9291505056fea26469706673582212200a5a0f 838d14ab827bd80c3be88fe223705850e5e032f9b180cc58570fa631ed64736f6c63430008190033",

"opcodes": "PUSH1 0x80 PUSH1 0x40 MSTORE CALLVALUE DUP1 ISZERO PUSH2 0xF JUMPI PUSH0 DUP1 REVERT JUMPDEST POP PUSH1 0x4 CALLDATASIZE LT PUSH2 0x55 JUMPI PUSH0 CALLDATALOAD PUSH1 0xE0 SHR DUP1 PUSH4 0x67844D2B EQ PUSH2 0x59 JUMPI DUP1 PUSH4 0x9ACE38C2 EQ PUSH2 0x75 JUMPI DUP1 PUSH4 0xB1E1C370 EQ PUSH2 0xA7 JUMPI DUP1 PUSH4 0xB5C604FF EQ PUSH2 0xD8 JUMPI DUP1 PUSH4 0xF7CD6AF9 EQ PUSH2 0xF6 JUMPI JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH2 0x73 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x6E SWAP2 SWAP1 PUSH2 0x5B5 JUMP JUMPDEST PUSH2 0x126 JUMP JUMPDEST STOP JUMPDEST PUSH2 0x8F PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x8A SWAP2 SWAP1 PUSH2 0x5F3 JUMP JUMPDEST PUSH2 0x424 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x9E SWAP4 SWAP3 SWAP2 SWAP1 PUSH2 0x63C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xC1 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0xBC SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x478 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xCF SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xE0 PUSH2 0x497 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xED SWAP2 SWAP1 PUSH2 0x6C3 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0x110 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x10B SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x4A3 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x11D SWAP2 SWAP1 PUSH2 0x718 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST DUP1

0x20 ADD SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD SLOAD LT **ISZERO** PUSH2 0x1A7 JUMPI PUSH1 0x40MLOAD PUSH32 PUSH1 0x4 ADD PUSH2 0x19E SWAP1 PUSH2 0x78B JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 REVERT JUMPDEST DUP1 PUSH0 DUP1 DUP5 PUSH20 AND PUSH20 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x1F4 SWAP2 SWAP1 PUSH2 0x7D6 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP DUP1 PUSH0 DUP1 DUP5 PUSH₂₀ AND PUSH20 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x249 SWAP2 SWAP1 PUSH2 0x809 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP PUSH1 0x1 PUSH1 0x40 MLOAD DUP1 PUSH1 0x60 ADD PUSH1 AND DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE POP SWAP1 DUP1 PUSH1 0x1 DUP2 SLOAD ADD DUP1 DUP3 SSTORE DUP1 SWAP2 POP POP PUSH1 0x1 SWAP1 SUB SWAP1 PUSH0 MSTORE PUSH1 0x20 PUSH0 KECCAK256 SWAP1 PUSH1 0x3 MUL ADD PUSH0 SWAP1 SWAP2 SWAP1 SWAP2 SWAP1 SWAP2 POP PUSH0 DUP3 ADD MLOAD DUP2 PUSH0 ADD PUSH0 PUSH2 0x100 EXP DUP2 SWAP1 SSTORE POP PUSH1 0x20 DUP3 ADD MLOAD DUP2 PUSH1 0x1 ADD SSTORE PUSH1 0x40 DUP3 ADD MLOAD DUP2 PUSH1 0x2 ADD SSTORE POP POP DUP2 PUSH20

PUSH20

SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE SWAP1 DUP2 PUSH0 DUP3 ADD SLOAD DUP2 MSTORE PUSH1 0x20 ADD PUSH1 0x1 DUP3 ADD SLOAD DUP2 MSTORE POP POP SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE DUP1 PUSH0 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 DUP2 MSTORE POP SWAP1 JUMP JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH0 PUSH20 0xffffffffffffffffffffffffffffff DUP3 AND SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH2 0x551 DUP3 PUSH2 0x528 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x561 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP2 EQ PUSH2 0x56B JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSHO DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x57C DUP2 PUSH2 0x558 JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP2 SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x594 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP2 EQ PUSH2 0x59E JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSH0 DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x5AF DUP2 PUSH2 0x58B JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP1 PUSH1 0x40 DUP4 DUP6 SUB SLT ISZERO PUSH2 0x5CB JUMPI PUSH2 0x5CA PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x5D8 DUP6 DUP3 DUP7 ADD PUSH2 0x56E JUMP JUMPDEST SWAP3 POP POP PUSH1 0x20 PUSH2 0x5E9 DUP6 DUP3 DUP7 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 POP SWAP3 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x608 JUMPI PUSH2 0x607 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x615 DUP5 DUP3 DUP6 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x627 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH2 0x636 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH0 PUSH1 0x60 DUP3 ADD SWAP1 POP PUSH2 0x64F PUSH0 DUP4 ADD DUP7 PUSH2 0x61E JUMP JUMPDEST PUSH2 0x65C PUSH1 0x20 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x669 PUSH1 0x40 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP5 SWAP4 POP POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x686 JUMPI PUSH2 0x685 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x693 DUP5 DUP3 DUP6 ADD PUSH2 0x56E JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x6AF PUSH0 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x6BC PUSH1 0x20 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP4 SWAP3 POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP PUSH2 0x6D6 PUSH0 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x6E5 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH1 0x40 DUP3 ADD PUSH0 DUP3 ADD MLOAD PUSH2 0x6FF PUSH0 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP PUSH1 0x20 DUP3 ADD MLOAD PUSH2 0x712 PUSH1 0x20 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x72B PUSH0 DUP4 ADD DUP5 PUSH2 0x6EB JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP3 DUP3 MSTORE PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH32 0x496E73756666696369656E74206D61696E6E65742062616C616E63652E000000 PUSH0 DUP3 ADD MSTORE POP JUMP JUMPDEST PUSH0 PUSH2 0x775 PUSH1 0x1D DUP4 PUSH2 0x731 JUMP JUMPDEST SWAP2 POP PUSH2 0x780 DUP3 PUSH2 0x741 JUMP JUMPDEST PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP DUP2 DUP2 SUB PUSH0 DUP4 ADD MSTORE PUSH2 0x7A2 DUP2 PUSH2 0x769 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH32 PUSH0 MSTORE PUSH1 0x11 PUSH1 0x4 MSTORE PUSH1 0x24 PUSH0 REVERT JUMPDEST PUSH0 PUSH2 0x7E0 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP2 POP PUSH2 0x7EB DUP4 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 SUB SWAP1 POP DUP2 DUP2 GT ISZERO PUSH2 0x803 JUMPI PUSH2 0x802 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH2 0x813 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 ADD SWAP1 POP DUP1 DUP3 GT ISZERO PUSH2 0x836 JUMPI PUSH2 0x835 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP INVALID LOG2 PUSH5 0x6970667358 0x22 SLT KECCAK256 EXP GAS 0xF DUP4 DUP14 EQ 0xAB DUP3 PUSH28 0xD80C3BE88FE223705850E5E032F9B180CC58570FA631ED64736F6C63 NUMBER STOP ADDMOD NOT STOP CALLER ".

"sourceMap":

"393:2830:0:-:0;;;;;;;;;;;;;;;;;;;;;;;;;;;;1992:648;;;;;;;;;;;;;;;;;;;;;;;1082:33;;;;;;;;;;;;;;;;;; ;:35;;;:45;;2076:87;;;;;;;;;;;;;;;;;;;;2265:6;2226:7;:20;2234:11;2226:20;;;;;;;;;;;;35;;;:45;;;;;;;;;;;;;;;;;; -;;;;;;2320:6;2281:7;:20;2289:11;2281:20;;;;;;;;35;;;45;;;;;1::-;;;;;;2368:12;2386:40;;;;;;239 ;;;;;;;;;;2460:11;2442:46;;;2473:6;2481;2442:46;;;;;;;;;;;;2547:11;2533:100;;;2560:7;:20;25 68:11;2560:20;;;;;;;;;;35;;;2597:7;:20;2605:11;2597:20;;;;;;;;;;35;;;2533:100;;;;;;;;;199 3169:7;3195:12;:19;;;;3188:26;;3116:105;:::0;2845:120::-;2906:13;;:::i;:::-;2938:7;:20;2946:11;2938:2 7:12;334:126;371:7;411:42;404:5;400:54;389:65;;334:126;;;...:0;466:96::-;503:7;532:24;550:5;532:24 ;:::i;:::-;521:35;;466:96;;;:::0;568:122::-;641:24;659:5;641:24;:::i;:::-;634:5;631:35;621:63;;680:1;677;6 70:12;621:63;568:122;:::0;696:139::-;742:5;780:6;767:20;758:29;;796:33;823:5;796:33;:::i;:::-;696:13 9;;;;:::0;841:77::-;878:7;907:5;896:16;;841:77;;;:::0;924:122::-;997:24;1015:5;997:24;:::i;:::-;990:5;987

```
:35;977:63;;1036:1;1033;1026:12;977:63;924:122;:::0;1052:139::-;1098:5;1136:6;1123:20;1114:29;;
1152:33;1179:5;1152:33;:::i;:::-;1052:139;;;;:::o;1197:474::-;1265:6;1273;1322:2;1310:9;1301:7;1297
:23;1293:32;1290:119;;;1328:79;;:::i;:::-;1290:119;1448:1;1473:53;1518:7;1509:6;1498:9;1494:22;14
73:53;:::i;:::-;1463:63;;1419:117;1575:2;1601:53;1646:7;1637:6;1626:9;1622:22;1601:53;:::i;:::-;1591
:63;;1546:118;1197:474;;;;:::0;1677:329::-;1736:6;1785:2;1773:9;1764:7;1760:23;1756:32;1753:119
;;;1791:79;;:::i;:::-;1753:119;1911:1;1936:53;1981:7;1972:6;1961:9;1957:22;1936:53;:::i;:::-;1926:63;;
1882:117;1677:329;;;;:::0;2012:118::-;2099:24;2117:5;2099:24;:::i;:::-;2094:3;2087:37;2012:118;;:::0;
2136:::-;2223:24;2241:5;2223:24;:::i;:::-;2218:3;2211:37;2136:118;;:::o;2260:442::-;2409:4;2447:2;24
36:9;2432:18;2424:26;;2460:71;2528:1;2517:9;2513:17;2504:6;2460:71;..:;..:-;2541:72;2609:2;2598
:9;2594:18;2585:6;2541:72;:::i;:::-;2623;2691:2;2680:9;2676:18;2667:6;2623:72;:::i;:::-;2260:442;;;;;
::0;2708:329::-;2767:6;2816:2;2804:9;2795:7;2791:23;2787:32;2784:119;;;2822:79;;:::i;:::-;2784:119;
2942:1;2967:53;3012:7;3003:6;2992:9;2988:22;2967:53;...i;...-;2957:63;;2913:117;2708:329;;,....o;3
043:332::-;3164:4;3202:2;3191:9;3187:18;3179:26;;3215:71;3283:1;3272:9;3268:17;3259:6;3215:71
;:::i;:::-;3296:72;3364:2;3353:9;3349:18;3340:6;3296:72;:::i;:::-;3043:332;;;;:::0;3381:222::-;3474:4;3
512:2;3501:9;3497:18;3489:26;;3525:71;3593:1;3582:9;3578:17;3569:6;3525:71;:::i;:::-;3381:222;;;:
::0;3609:108::-;3686:24;3704:5;3686:24;:::i;:::-;3681:3;3674:37;3609:108;;:::0;3807:519::-;3946:4;39
41:3;3937:14;4043:4;4036:5;4032:16;4026:23;4062:63;4119:4;4114:3;4110:14;4096:12;4062:63;:::i;
:::-;3961:174;4227:4;4220:5;4216:16;4210:23;4246:63;4303:4;4298:3;4294:14;4280:12;4246:63;:::i;:
::-;4145:174;3915:411;3807:519;;:::0;4332:306::-;4467:4;4505:2;4494:9;4490:18;4482:26;;4518:113;
4628:1;4617:9;4613:17;4604:6;4518:113;...;4332:306;;;;...o;4644:169::-;4728:11;4762:6;4757:3;
4750:19;4802:4;4797:3;4793:14;4778:29;;4644:169;;;;:::0;4819:179::-;4959:31;4955:1;4947:6;4943:
14;4936:55;4819:179;:::0;5004:366::-;5146:3;5167:67;5231:2;5226:3;5167:67;:::i;:::-;5160:74;;5243:
93;5332:3;5243:93;:::i;:::-;5361:2;5356:3;5352:12;5345:19;;5004:366;;;:::0;5376:419::-;5542:4;5580:
2;5569:9;5565:18;5557:26;;5629:9;5623:4;5619:20;5615:1;5604:9;5600:17;5593:47;5657:131;5783:
4;5657:131;:::i;:::-;5649:139;;5376:419;;;:::0;5801:180::-;5849:77;5846:1;5839:88;5946:4;5943:1;593
6:15;5970:4;5967:1;5960:15;5987:194;6027:4;6047:20;6065:1;6047:20;...;...-;6042:25;;6081:20;609
```

```
9:1;6081:20;:::i;:::-;6076:25;;6125:1;6122;6118:9;6110:17;;6149:1;6143:4;6140:11;6137:37;;;6154:1
8;;:::i;:::-;6137:37;5987:194;;;;:::0;6187:191::-;6227:3;6246:20;6264:1;6246:20;:::i;:::-;6241:25;;6280:
20;6298:1;6280:20;:::i;:::-;6275:25;;6323:1;6320;6316:9;6309:16;;6344:3;6341:1;6338:10;6335:36;;;
6351:18;;:::i;:::-;6335:36;6187:191;;;;:::o"
       },
       "gasEstimates": {
          "creation": {
             "codeDepositCost": "432400",
             "executionCost": "44879",
             "totalCost": "477279"
          },
          "external": {
             "getLedger(address)": "infinite",
             "getTotalTransactions()": "2484",
             "ledgers(address)": "infinite",
             "performTransaction(address,uint256)": "infinite",
             "transactions(uint256)": "infinite"
          }
       },
       "methodIdentifiers": {
          "getLedger(address)": "f7cd6af9",
          "getTotalTransactions()": "b5c604ff",
          "ledgers(address)": "b1e1c370",
          "performTransaction(address,uint256)": "67844d2b",
          "transactions(uint256)": "9ace38c2"
       }
```

```
},
"abi": [
  {
     "inputs": [],
     "stateMutability": "nonpayable",
     "type": "constructor"
  },
  {
     "anonymous": false,
     "inputs": [
       {
          "indexed": true,
          "internalType": "address",
          "name": "participant",
          "type": "address"
       },
       {
          "indexed": false,
          "internalType": "uint256",
          "name": "newMainnetBalance",
          "type": "uint256"
       },
       {
          "indexed": false,
          "internalType": "uint256",
          "name": "newTestnetBalance",
```

```
"type": "uint256"
     }
  ],
  "name": "LedgerUpdated",
  "type": "event"
},
{
  "anonymous": false,
  "inputs": [
     {
        "indexed": true,
        "internalType": "address",
        "name": "participant",
        "type": "address"
     },
     {
        "indexed": false,
        "internalType": "uint256",
        "name": "mainnetAmount",
        "type": "uint256"
     },
     {
        "indexed": false,
        "internalType": "uint256",
        "name": "testnetAmount",
        "type": "uint256"
```

```
}
  ],
  "name": "TransactionLogged",
  "type": "event"
},
{
  "inputs": [
     {
        "internalType": "address",
        "name": "participant",
        "type": "address"
     }
  ],
  "name": "getLedger",
   "outputs": [
     {
        "components": [
          {
             "internalType": "uint256",
             "name": "mainnetBalance",
             "type": "uint256"
          },
             "internalType": "uint256",
             "name": "testnetBalance",
             "type": "uint256"
```

```
}
        ],
        "internalType": "struct LiminalFinancialSystem.Ledger",
        "name": "",
        "type": "tuple"
     }
  ],
   "stateMutability": "view",
  "type": "function"
},
{
  "inputs": [],
   "name": "getTotalTransactions",
   "outputs": [
     {
        "internalType": "uint256",
        "name": "",
        "type": "uint256"
     }
  ],
  "stateMutability": "view",
  "type": "function"
},
{
  "inputs": [
     {
```

```
"internalType": "address",
     "name": "",
     "type": "address"
  }
],
"name": "ledgers",
"outputs": [
  {
     "internalType": "uint256",
     "name": "mainnetBalance",
     "type": "uint256"
  },
  {
     "internalType": "uint256",
     "name": "testnetBalance",
     "type": "uint256"
  }
],
"stateMutability": "view",
"type": "function"
"inputs": [
  {
     "internalType": "address",
     "name": "participant",
```

},

{

```
"type": "address"
     },
     {
        "internalType": "uint256",
        "name": "amount",
        "type": "uint256"
     }
  ],
  "name": "performTransaction",
  "outputs": [],
  "stateMutability": "nonpayable",
  "type": "function"
},
{
  "inputs": [
     {
        "internalType": "uint256",
        "name": "",
        "type": "uint256"
     }
  ],
  "name": "transactions",
  "outputs": [
     {
        "internalType": "address",
        "name": "participant",
```

```
"type": "address"
          },
          {
             "internalType": "uint256",
             "name": "mainnetAmount",
             "type": "uint256"
          },
          {
             "internalType": "uint256",
             "name": "testnetAmount",
             "type": "uint256"
          }
       ],
       "stateMutability": "view",
       "type": "function"
    }
  ]
},
{
  "id": "1f1f9afeac485b58626eaa191a500738",
  "_format": "hh-sol-build-info-1",
  "solcVersion": "0.8.25",
  "solcLongVersion": "0.8.25+commit.b61c2a91",
  "input": {
     "language": "Solidity",
     "sources": {
```

"Mainnet2testnet.sol": {

"content": "// SPDX-License-Identifier: MIT\npragma solidity ^0.8.0;\n\n/**\n * @title Liminal Financial Transaction System\n * @author James Ocallaghan\n * @notice This contract demonstrates a dual-ledger transaction system for Citibank Demo Business Inc.\n * @dev The system showcases credit/debit balance management across mainnet and testnet ledgers.\n * Visit ENS: citibankdemobusiness.dev for details.\n */\n\ncontract LiminalFinancialSystem {\n // Struct for holding ledger balance information\n struct Ledger {\n uint256 mainnetBalance; // Represents the mainnet balance (can be thought of as 'credit')\n uint256 testnetBalance; // Represents the testnet balance (can be thought of as 'debit')\n \\n\n // Struct for a transaction\n struct Transaction {\n address participant;\n uint256 mainnetAmount; // Amount debited from the mainnet\n uint256 testnetAmount; // Amount credited to the testnet\n n/n// Mapping of user addresses to ledger balances\n mapping(address => Ledger) public ledgers;\n\n // Array of all transactions, for demo purposes\n Transaction[] public transactions;\n\n for logging transactions and balance adjustments\n event TransactionLogged(address indexed participant, uint256 mainnetAmount, uint256 testnetAmount);\n event LedgerUpdated(address indexed participant, uint256 newMainnetBalance, uint256 newTestnetBalance);\n\n /**\n Initialize with a transaction\n constructor() {\n // Initialize the contract with default ledger *∧n balances for demonstration purposes\n ledgers[msq.sender].mainnetBalance = 1000; // Mainnet 'credit' balance\n ledgers[msq.sender].testnetBalance = 500; // Testnet 'debit' balance\n \\n\n /**\n * @dev Perform a transaction, debiting the mainnet balance and crediting the testnet balance.\n * @param participant The address of the participant performing the transaction.\n @param amount The amount to transfer between ledgers.\n */\n function performTransaction(address participant. uint256 amount) external require(ledgers[participant].mainnetBalance >= amount, \"Insufficient mainnet balance.\");\n\n // Debit from mainnet and credit to testnet\n ledgers[participant].mainnetBalance -= amount;\n ledgers[participant].testnetBalance += amount;\n\n // Log the transaction\n

```
transactions.push(Transaction(participant,
                                             amount,
                                                         amount));\n
                                                                                                emit
TransactionLogged(participant, amount, amount);\n\n
                                                               // Update the ledger\n
                                                                                                emit
LedgerUpdated(participant,
                                                               ledgers[participant].mainnetBalance,
                                                          * @dev Getter function for a participant's
ledgers[participant].testnetBalance);\n
                                         }\n\n
                                                 /**\n
                      * @param participant The address of the participant.\n
ledger balances.\n
                                                                                  * @return Ledger
memory The ledger of the participant.\n
                                           *∧n
                                                 function getLedger(address participant) public view
                                    return ledgers[participant];\n
returns (Ledger memory) {\n
                                                                    }\n\n
                                                                            /**\n
                                                                                     * @dev Getter
                                                           * @return uint256 The total number of
function for total transactions (for demonstration).\n
                        function getTotalTransactions() public view returns (uint256) {\n
transactions.\n
                  *∧n
                                                                                              return
transactions.length;\n
         }
       },
       "settings": {
          "optimizer": {
            "enabled": false,
            "runs": 200
         },
          "outputSelection": {
            "*": {
               "": [
                 "ast"
              ],
               "*": [
                 "abi",
```

"metadata",

"devdoc",

```
"userdoc",
            "storageLayout",
            "evm.legacyAssembly",
            "evm.bytecode",
            "evm.deployedBytecode",
            "evm.methodIdentifiers",
            "evm.gasEstimates",
            "evm.assembly"
         ]
       }
     },
     "remappings": []
  }
},
"output": {
  "contracts": {
     "Mainnet2testnet.sol": {
       "LiminalFinancialSystem": {
          "abi": [
            {
               "inputs": [],
               "stateMutability": "nonpayable",
               "type": "constructor"
            },
            {
               "anonymous": false,
```

```
"inputs": [
     {
       "indexed": true,
       "internalType": "address",
       "name": "participant",
       "type": "address"
     },
     {
       "indexed": false,
       "internalType": "uint256",
       "name": "newMainnetBalance",
       "type": "uint256"
     },
     {
       "indexed": false,
       "internalType": "uint256",
       "name": "newTestnetBalance",
       "type": "uint256"
    }
  ],
  "name": "LedgerUpdated",
  "type": "event"
},
  "anonymous": false,
  "inputs": [
```

```
{
        "indexed": true,
        "internalType": "address",
        "name": "participant",
        "type": "address"
     },
     {
        "indexed": false,
        "internalType": "uint256",
        "name": "mainnetAmount",
        "type": "uint256"
     },
     {
        "indexed": false,
        "internalType": "uint256",
        "name": "testnetAmount",
        "type": "uint256"
     }
  ],
  "name": "TransactionLogged",
  "type": "event"
},
{
  "inputs": [
     {
        "internalType": "address",
```

```
"name": "participant",
     "type": "address"
  }
],
"name": "getLedger",
"outputs": [
  {
     "components": [
       {
          "internalType": "uint256",
          "name": "mainnetBalance",
          "type": "uint256"
       },
       {
          "internalType": "uint256",
          "name": "testnetBalance",
          "type": "uint256"
       }
     ],
     "internalType": "struct LiminalFinancialSystem.Ledger",
     "name": "",
     "type": "tuple"
  }
],
"stateMutability": "view",
"type": "function"
```

```
},
{
  "inputs": [],
  "name": "getTotalTransactions",
  "outputs": [
     {
        "internalType": "uint256",
        "name": "",
        "type": "uint256"
     }
  ],
  "stateMutability": "view",
  "type": "function"
},
{
  "inputs": [
     {
        "internalType": "address",
        "name": "",
        "type": "address"
     }
  ],
  "name": "ledgers",
  "outputs": [
     {
        "internalType": "uint256",
```

```
"name": "mainnetBalance",
        "type": "uint256"
     },
     {
        "internalType": "uint256",
        "name": "testnetBalance",
        "type": "uint256"
    }
  ],
  "stateMutability": "view",
  "type": "function"
},
{
  "inputs": [
     {
       "internalType": "address",
        "name": "participant",
        "type": "address"
     },
     {
        "internalType": "uint256",
        "name": "amount",
        "type": "uint256"
     }
  ],
  "name": "performTransaction",
```

```
"outputs": [],
  "stateMutability": "nonpayable",
  "type": "function"
},
{
  "inputs": [
     {
        "internalType": "uint256",
        "name": "",
        "type": "uint256"
     }
  ],
  "name": "transactions",
  "outputs": [
     {
        "internalType": "address",
        "name": "participant",
        "type": "address"
     },
     {
        "internalType": "uint256",
        "name": "mainnetAmount",
        "type": "uint256"
     },
     {
        "internalType": "uint256",
```

```
"name": "testnetAmount",
                          "type": "uint256"
                       }
                    ],
                    "stateMutability": "view",
                    "type": "function"
                  }
               ],
               "devdoc": {
                  "author": "James Ocallaghan",
                        "details": "The system showcases credit/debit balance management across
mainnet and testnet ledgers. Visit ENS: citibankdemobusiness.dev for details.",
                  "kind": "dev",
                  "methods": {
                    "constructor": {
                       "details": "Initialize with a transaction"
                    },
                    "getLedger(address)": {
                       "details": "Getter function for a participant's ledger balances.",
                       "params": {
                          "participant": "The address of the participant."
                       },
                       "returns": {
                         "_0": "Ledger memory The ledger of the participant."
                       }
                    },
```

```
"getTotalTransactions()": {
                    "details": "Getter function for total transactions (for demonstration).",
                    "returns": {
                      " 0": "uint256 The total number of transactions."
                    }
                  },
                  "performTransaction(address,uint256)": {
                      "details": "Perform a transaction, debiting the mainnet balance and crediting
the testnet balance.",
                    "params": {
                      "amount": "The amount to transfer between ledgers.",
                      "participant": "The address of the participant performing the transaction."
                    }
                  }
               },
                "title": "Liminal Financial Transaction System",
                "version": 1
             },
             "evm": {
                                                /* \"Mainnet2testnet.sol\":393:3223 contract
                                "assembly": "
LiminalFinancialSystem {... *\n mstore(0x40, 0x80)\n
                                                        /* \"Mainnet2testnet.sol\":1456:1725
constructor() {... */\n callvalue\n dup1\n iszero\n tag_1\n jumpi\n 0x00\n dup1\n revert\ntag_1:\n
                 /* \"Mainnet2testnet.sol\":1608:1612
  n/qoq
                                                        1000
                                                               *∧n
                                                                       0x03e8\n
\"Mainnet2testnet.sol\":1571:1578 ledgers *\\n 0x00\\n /* \"Mainnet2testnet.sol\":1571:1590
ledgers[msg.sender] *\n dup1\n /* \"Mainnet2testnet.sol\":1579:1589 msg.sender *\n caller\n
```

0x20\n add\n 0x00\n keccak256\n \"Mainnet2testnet.sol\":1571:1605 ledgers[msg.sender].mainnetBalance */\n 0x00\n add\n /* \"Mainnet2testnet.sol\":1571:1612 ledgers[msg.sender].mainnetBalance = 1000 *\n dup2\n swap1\n sstore\n n/aoa \"Mainnet2testnet.sol\":1687:1690 500 *\n 0x01f4\n /* \"Mainnet2testnet.sol\":1650:1657 ledgers /* \"Mainnet2testnet.sol\":1650:1669 | ledgers[msg.sender] */\n */\n 0x00\n dup1\n \"Mainnet2testnet.sol\":1658:1668 msg.sender *\n caller\n /* \"Mainnet2testnet.sol\":1650:1669 dup2\n mstore\n 0x20\n add\n swap1\n dup2\n mstore\n 0x20\n add\n 0x00\n keccak256\n /* \"Mainnet2testnet.sol\":1650:1684 | ledgers[msg.sender].testnetBalance *\\n 0x01\n add\n \"Mainnet2testnet.sol\":1650:1690 ledgers[msg.sender].testnetBalance = 500 *\n dup2\n swap1\n /* \"Mainnet2testnet.sol\":393:3223 contract LiminalFinancialSystem {... *\n sstore\n pop\n dataSize(sub 0)\n dup1\n dataOffset(sub 0)\n 0x00\n codecopy\n 0x00\n return\nstop\n\nsub 0: assembly {\n /* \"Mainnet2testnet.sol\":393:3223 contract LiminalFinancialSystem {... */n mstore(0x40, 0x80)\n callvalue\n dup1\n iszero\n tag_1\n jumpi\n 0x00\n dup1\n revert\n tag_1:\n pop\n jumpi(tag_2, It(calldatasize, 0x04))\n shr(0xe0, calldataload(0x00))\n 0x67844d2b\n eq\n dup1\n 0x9ace38c2\n tag 3\n jumpi\n dup1\n eg\n tag_4\n jumpi\n dup1\n 0xb1e1c370\n eq\n dup1\n 0xb5c604ff\n tag 5\n jumpi\n eg\n tag 6\n jumpi\n dup1\n 0xf7cd6af9\n eg\n tag 7\n jumpi\n tag 2:\n 0x00\n dup1\n revert\n /* \"Mainnet2testnet.sol\":1992:2640 function performTransaction(address participant, tag_3:\n uint256 amount) external {... *\n tag_8\n 0x04\n dup1\n calldatasize\n sub\n dup2\n add\n swap1\n tag_9\n swap2\n swap1\n tag_10\n jump\t// in\n tag_9:\n tag 11\n jump\t// in\n tag_8:\n stop\n /* \"Mainnet2testnet.sol\":1082:1115 Transaction[] public transactions *\n tag 4:\n tag_12\n 0x04\n dup1\n calldatasize\n sub\n dup2\n add\n swap1\n tag 13\n

swap2\n swap1\n tag_14\n jump\t// in\n tag_13:\n tag_15∖n jump\t// in\n tag_12:\n mload(0x40)\n tag_16\n swap4\n swap3\n swap2\n swap1\n mload(0x40)\n dup1\n tag_17\n jump\t// in\n tag 16:\n swap2\n sub\n swap1\n /* \"Mainnet2testnet.sol\":982:1023 mapping(address => Ledger) public ledgers *\n return\n 0x04\n dup1\n calldatasize\n tag 5:\n tag 18\n sub\n dup2\n add\n swap1\n tag_19\n swap2\n swap1\n tag_20\n jump\t// in\n tag_19:\n tag_21\n jump\t// in\n tag_18:\n mload(0x40)\n tag_22\n swap3\n swap2\n swap1\n tag 23\n jump\t// in\n tag 22:\n mload(0x40)\n dup1\n swap2\n sub\n swap1\n /* \"Mainnet2testnet.sol\":3116:3221 function getTotalTransactions() public view return\n tag 24\n returns (uint256) {... *\n tag 6:\n tag 25\n jump\t// in\n tag_24:\n $mload(0x40)\n$ tag 26\n swap2\n swap1\n tag_27\n jump\t// in\n tag 26:\n swap2\n sub\n swap1\n return\n /* $mload(0x40)\n$ dup1\n function getLedger(address participant) public view returns \"Mainnet2testnet.sol\":2845:2965 (Ledger memory) {... */\n tag 7:\n tag 28\n 0x04\n dup1\n calldatasize\n sub\n dup2\n add\n swap1\n tag 29\n swap2\n swap1\n tag 20\n jump\t// in\n mload(0x40)\n jump\t// in\n tag_28:\n tag 29:\n tag_30\n tag_31\n swap2\n tag_32\n $jump\t// in\n tag_31:\n$ mload(0x40)\n dup1\n swap2\n swap1\n sub\n /* \"Mainnet2testnet.sol\":1992:2640 swap1\n return\n function performTransaction(address participant, uint256 amount) external {... *\n tag 11:\n /* \"Mainnet2testnet.sol\":2123:2129 amount *\n /* \"Mainnet2testnet.sol\":2084:2091 dup1\n ledgers */\n 0x00\n /* \"Mainnet2testnet.sol\":2084:2104 ledgers[participant] */\n dup1\n /* /* \"Mainnet2testnet.sol\":2092:2103 participant *∧n dup5\n \"Mainnet2testnet.sol\":2084:2104 ledgers[participant] *\n Oxfffffffffffffffffffffffffffffff and\n and\n dup2\n mstore\n 0x20\n add\n swap1\n mstore\n 0x20\n add\n 0x00\n keccak256\n /* dup2\n \"Mainnet2testnet.sol\":2084:2119 ledgers[participant].mainnetBalance *\n 0x00\n add\n

sload\n /* \"Mainnet2testnet.sol\":2084:2129 | ledgers[participant].mainnetBalance >= amount */\n lt\n iszero\n \"Mainnet2testnet.sol\":2076:2163 require(ledgers[participant].mainnetBalance >= amount, \"Insufficient mainnet balance.\") *\n tag 34\n jumpi\n $mload(0x40)\n$ dup2\n 0x04\n mstore\n add\n tag_35\n swap1\n tag 36\n jump\t// in\n tag_35:\n $mload(0x40)\n$ dup1\n swap2\n sub\n swap1\n tag_34:\n /* revert\n \"Mainnet2testnet.sol\":2265:2271 amount */\n dup1\n /* \"Mainnet2testnet.sol\":2226:2233 /* \"Mainnet2testnet.sol\":2226:2246 ledgers[participant] *\n 0x00\n ledgers */\n /* \"Mainnet2testnet.sol\":2234:2245 participant *∧n /* dup5\n \"Mainnet2testnet.sol\":2226:2246 ledgers[participant] *\n Oxfffffffffffffffffffffffffhn and\n and\n dup2\n mstore\n 0x20\n add\n swap1\n dup2\n mstore\n 0x20\n add\n 0x00\n keccak256\n \"Mainnet2testnet.sol\":2226:2261 ledgers[participant].mainnetBalance *\n 0x00\n add\n 0x00\n /* \"Mainnet2testnet.sol\":2226:2271 ledgers[participant].mainnetBalance -= amount *\n dup3\n dup3\n sload\n tag_37\n swap2\n swap1\n tag 38\n jump\t// in\n tag_37:\n dup2\n swap1\n swap3\n pop\n pop\n sstore\n pop\n \"Mainnet2testnet.sol\":2320:2326 amount *\n /* \"Mainnet2testnet.sol\":2281:2288 dup1\n ledgers */\n 0x00\n /* \"Mainnet2testnet.sol\":2281:2301 ledgers[participant] *\n /* /* \"Mainnet2testnet.sol\":2289:2300 participant *∧n dup5\n 0xfffffffffffffffffffffffffffffffffff \"Mainnet2testnet.sol\":2281:2301 | ledgers[participant] *\n and\n and\n dup2\n mstore\n 0x20\n add\n /* swap1\n dup2\n mstore\n 0x20\n add\n 0x00\n keccak256\n \"Mainnet2testnet.sol\":2281:2316 ledgers[participant].testnetBalance */\n 0x01\n add\n 0x00\n /* \"Mainnet2testnet.sol\":2281:2326 ledgers[participant].testnetBalance += amount *\n dup3\n dup3\n sload\n tag 39\n swap2\n swap1\n tag 40\n jump\t// in\n

tag 39:\n swap3\n pop\n pop\n dup2\n swap1\n sstore\n pop\n /* \"Mainnet2testnet.sol\":2368:2380 transactions */\n 0x01\n \"Mainnet2testnet.sol\":2386:2426 Transaction(participant, amount, amount) *\n mload(0x40)\n dup1\n 0x60\n add\n 0x40\n mstore\n dup1\n \"Mainnet2testnet.sol\":2398:2409 participant /* */\n dup5\n \"Mainnet2testnet.sol\":2386:2426 Transaction(participant, amount, amount) *∧n and\n dup2\n mstore\n 0x20\n add\n /* \"Mainnet2testnet.sol\":2411:2417 amount *\n dup4\n /* \"Mainnet2testnet.sol\":2386:2426 Transaction(participant, amount, amount) *\n dup2\n 0x20\n add\n mstore\n \"Mainnet2testnet.sol\":2419:2425 amount *\n /* \"Mainnet2testnet.sol\":2386:2426 dup4\n /* Transaction(participant, amount, amount) *\n dup2\n mstore\n n/qoq \"Mainnet2testnet.sol\":2368:2427 transactions.push(Transaction(participant, amount, amount)) *\n swap1\n dup1\n 0x01\n dup2\n sload\n add\n dup1\n dup3\n sstore\n dup1\n swap2\n pop\n pop\n 0x01\n swap1\n sub∖n 0x00\n swap1\n mstore\n keccak256(0x00, 0x20)\n swap1\n 0x03\n mul\n add\n 0x00\n 0x00\n swap1\n swap2\n swap1\n swap2\n swap1\n swap2\n pop\n dup3\n add\n mload\n 0x00\n add\n $\exp(0x0100, 0x00)\n$ dup2\n sload\n dup2\n dup2\n 0xfffffffffffffffffffffffffffffff mul\n not\n and\n swap1\n dup4\n Oxffffffffffffffffffffffffffffff and\n mul\n or\n swap1\n sstore\n pop\n 0x20\n add\n mload\n dup2\n 0x01\n add\n 0x40\n dup3\n sstore\n dup3\n add\n mload\n dup2\n 0x02\n add\n sstore\n pop\n pop\n \"Mainnet2testnet.sol\":2460:2471 participant */\n dup2\n TransactionLogged(participant, amount, amount) *\n \"Mainnet2testnet.sol\":2442:2488 Oxfffffffffffffffffffffffffffffff and\n 0x7772d368cd3cc6fa8dc9c0956d36dd1243d603abc8d99496f89d0e6950d80dde\n

dup3\n

/* \"Mainnet2testnet.sol\":2481:2487

\"Mainnet2testnet.sol\":2473:2479 amount *\n

amount *\n dup4\n /* \"Mainnet2testnet.sol\":2442:2488 TransactionLogged(participant, amount, amount) *\n mload(0x40)\n tag_42\n swap3\n swap2\n swap1\n dup1\n tag 23\n jump\t// in\n tag 42:\n mload(0x40)\n swap2\n sub\n swap1\n /* \"Mainnet2testnet.sol\":2547:2558 participant *\n dup2\n loa2\n \"Mainnet2testnet.sol\":2533:2633 LedgerUpdated(participant, ledgers[participant].mainnetBalance, ledgers[participant].testnetBalance) *\n 0xfffffffffffffffffffffffffffffffff and\n 0xe3e2e5b15dbd2776222deab4cbd7fb2aeeecfd735eed24e9809b2352f3fa2d37\n /* \"Mainnet2testnet.sol\":2560:2567 ledgers *\n 0x00\n /* \"Mainnet2testnet.sol\":2560:2580 ledgers[participant] *∧n /* \"Mainnet2testnet.sol\":2568:2579 participant *\n dup1\n \"Mainnet2testnet.sol\":2560:2580 dup6\n ledgers[participant] *∧n Oxffffffffffffffffffffffffffffffff and\n Oxffffffffffffffffffffffffffffff and\n dup2\n add\n swap1\n mstore\n 0x20\n add\n 0x00\n mstore\n 0x20\n dup2\n /* \"Mainnet2testnet.sol\":2560:2595 | ledgers[participant].mainnetBalance *\n keccak256\n 0x00\n add\n sload\n /* \"Mainnet2testnet.sol\":2597:2604 ledgers *\n 0x00\n /* \"Mainnet2testnet.sol\":2597:2617 ledgers[participant] *∧n dup1\n \"Mainnet2testnet.sol\":2605:2616 participant *∧n dup7\n /* \"Mainnet2testnet.sol\":2597:2617 | ledgers[participant] *\n 0xfffffffffffffffffffffffffff 0xffffffffffffffffffffffffffffffffff and\n and\n dup2\n mstore\n 0x20\n add\n dup2\n mstore\n 0x20\n add\n 0x00\n keccak256\n /* swap1\n \"Mainnet2testnet.sol\":2597:2632 ledgers[participant].testnetBalance */\n add\n 0x01\n sload\n \"Mainnet2testnet.sol\":2533:2633 LedgerUpdated(participant, ledgers[participant].mainnetBalance, ledgers[participant].testnetBalance) *\n mload(0x40)\n tag_43\n swap3\n swap2\n swap1\n tag 23\n jump\t// in\n tag 43:\n mload(0x40)\n dup1\n swap2\n sub\n swap1\n log2\n /* \"Mainnet2testnet.sol\":1992:2640 function performTransaction(address participant, uint256 amount) external {... *\n pop\n pop\n jump\t// out\n /*

\"Mainnet2testnet.sol\":1082:1115 Transaction[] public transactions *\n tag 15:\n 0x01\n dup2\n dup2\n sload\n dup2\n lt\n tag_44\n jumpi\n 0x00\n dup1\n keccak256(0x00, 0x20)\n revert\n tag 44:\n swap1\n 0x00\n mstore\n swap1\n 0x03\n mul\n add\n 0x00\n swap2\n pop\n swap1\n pop\n dup1\n 0x00\n add\n 0x00\n swap1\n sload\n swap1\n swap1\n 0x0100\n exp\n Oxffffffffffffffffffffffffhn div\n and\n swap1\n dup1\n 0x01\n add\n sload\n swap1\n dup1\n 0x02\n add\n sload\n swap1\n dup4\n pop\n jump\t// out\n /* \"Mainnet2testnet.sol\":982:1023 mapping(address => Ledger) public ledgers *∧n tag 21:\n mstore(0x20, 0x00)\n dup1\n 0x00\n mstore\n keccak256(0x00. 0x40)\n 0x00\n swap2\n pop\n swap1\n pop\n dup1\n 0x00\n add\n sload\n swap1\n dup1\n 0x01\n add\n sload\n swap1\n n/qoq dup3\n /* \"Mainnet2testnet.sol\":3116:3221 function getTotalTransactions() public view jump\t// out\n /* \"Mainnet2testnet.sol\":3169:3176 uint256 */\n returns (uint256) {... *\n tag 25:\n 0x00\n /* /* \"Mainnet2testnet.sol\":3195:3207 transactions */\n 0x01\n sload\n \"Mainnet2testnet.sol\":3195:3214 transactions.length *\n dup1\n swap1\n /* \"Mainnet2testnet.sol\":3188:3214 return transactions.length *\n n/qoq swap1\n n/qoq /* \"Mainnet2testnet.sol\":3116:3221 function getTotalTransactions() public view returns (uint256) {... *∧n /* \"Mainnet2testnet.sol\":2845:2965 swap1\n jump\t// out\n function getLedger(address participant) public view returns (Ledger memory) {... *\n tag 30:\n /* \"Mainnet2testnet.sol\":2906:2919 Ledger memory *\n tag 47\n tag_48\n jump\t// in\n /* \"Mainnet2testnet.sol\":2938:2945 ledgers *∧n 0x00\n /* tag 47:\n \"Mainnet2testnet.sol\":2938:2958 ledgers[participant] *∧n dup1\n /* \"Mainnet2testnet.sol\":2946:2957 participant *∧n dup4\n \"Mainnet2testnet.sol\":2938:2958 | ledgers[participant] *\n Oxffffffffffffffffffffffffffhn and\n 0xffffffffffffffffffffffffffffff and\n dup2\n mstore\n 0x20\n add\n swap1\n dup2\n mstore\n 0x20\n add\n 0x00\n keccak256\n /*

\"Mainnet2testnet.sol\":2931:2958 return ledgers[participant] *\n $mload(0x40)\n$ dup1\n 0x40\n add\n 0x40\n mstore\n swap1\n dup2\n 0x00\n dup3\n add\n sload\n sload\n dup2\n mstore\n 0x20\n add\n 0x01\n dup3\n add\n /* dup2\n mstore\n pop\n pop\n swap1\n pop\n \"Mainnet2testnet.sol\":2845:2965 function getLedger(address participant) public view returns (Ledger memory) {... *\n swap2\n swap1\n pop\n jump\t// out\n tag_48:\n $mload(0x40)\n$ 0x40\n add\n 0x40\n mstore\n dup1\n 0x00\n dup2\n dup1\n mstore\n 0x20\n add\n 0x00\n dup2\n mstore\n pop\n swap1\n jump\t// /* \"#utility.yul\":88:205 */\n tag 51:\n /* \"#utility.yul\":197:198 */\n out\n 0x00\n /* \"#utility.yul\":194:195 */\n dup1\n /* \"#utility.yul\":187:199 /* *∧n revert\n tag 53:\n /* \"#utility.yul\":371:378 \"#utility.yul\":334:460 */\n *∧n 0x00\n /* \"#utility.yul\":411:453 */\n 0xffffffffffffffffffffffffffffffff /* \"#utility.yul\":404:409 *\n /* \"#utility.yul\":389:454 */\n dup3\n /* \"#utility.yul\":400:454 */\n and\n pop\n /* \"#utility.yul\":334:460 *\n swap2\n swap1\n pop\n jump\t// out\n /* \"#utility.yul\":466:562 */\n tag 54:\n /* \"#utility.yul\":503:510 */\n 0x00\n /* tag_74\n /* \"#utility.yul\":550:555 /* \"#utility.yul\":532:556 */\n *∧n dup3\n \"#utility.yul\":532:556 */\n tag_53\n jump\t// in\n tag_74:\n /* \"#utility.yul\":521:556 /* \"#utility.yul\":466:562 */\n */\n swap1\n n/qoq swap2\n swap1\n n/qoq jump\t// out\n /* \"#utility.yul\":568:690 */\n tag 55:\n /* \"#utility.yul\":641:665 *\n /* \"#utility.yul\":659:664 */\n dup2\n /* \"#utility.yul\":641:665 */\n tag 76\n tag 54\n /* \"#utility.yul\":634:639 *\n jump\t// in\n tag 76:\n dup2\n /* \"#utility.yul\":631:666 jumpi\n */\n eq\n /* \"#utility.yul\":621:684 *\\n tag_77∖n /* \"#utility.yul\":680:681 */\n 0x00\n /* \"#utility.yul\":677:678 */\n dup1\n /* \"#utility.yul\":670:682 *\n revert\n /* \"#utility.yul\":621:684 *\\n tag_77:\\n /* \"#utility.yul\":568:690 *\\n pop\n /* \"#utility.yul\":696:835 */\n tag_56:\n /* \"#utility.yul\":742:747 jump\t// out\n *∧n 0x00\n /* \"#utility.yul\":780:786 *∧n dup2\n /* \"#utility.yul\":767:787 *∧n

calldataload\n /* \"#utility.yul\":758:787 */\n swap1\n pop\n /* \"#utility.yul\":796:829 */\n tag_79\n /* \"#utility.yul\":823:828 */\n dup2\n /* \"#utility.yul\":796:829 */\n $jump\t// in\n tag 79:\n$ /* \"#utility.yul\":696:835 */\n tag 55\n swap3\n swap2\n jump\t// out\n /* pop\n pop\n /* \"#utility.yul\":841:918 *∧n tag 57:\n \"#utility.yul\":878:885 0x00\n /* \"#utility.yul\":907:912 /* */\n */\n dup2\n \"#utility.yul\":896:912 */\n swap1\n pop\n /* \"#utility.yul\":841:918 */\n swap2\n swap1\n jump\t// out\n /* \"#utility.yul\":924:1046 *∧n tag_58:\n /* pop\n \"#utility.yul\":997:1021 *∧n tag 82\n /* \"#utility.yul\":1015:1020 *\n dup2\n /* \"#utility.yul\":997:1021 tag 57\n jump\t// in\n tag 82:\n /* \"#utility.yul\":990:995 *∧n /* \"#utility.yul\":987:1022 */\n /* \"#utility.yul\":977:1040 *\n *∧n dup2\n eg\n 0x00\n tag 83\n jumpi\n /* \"#utility.yul\":1036:1037 */\n /* \"#utility.yul\":1033:1034 dup1\n *∧n /* \"#utility.yul\":1026:1038 *\n revert\n /* \"#utility.yul\":977:1040 */\n /* tag_83:\n /* \"#utility.yul\":924:1046 */\n pop\n jump\t// out\n \"#utility.yul\":1052:1191 */\n tag 59:\n /* \"#utility.yul\":1098:1103 */\n 0x00\n /* \"#utility.yul\":1136:1142 */\n dup2\n /* \"#utility.yul\":1123:1143 */\n calldataload\n /* \"#utility.yul\":1152:1185 /* \"#utility.yul\":1114:1143 *\\n swap1\n pop\n /* \"#utility.yul\":1179:1184 *\n /* \"#utility.yul\":1152:1185 tag_85\n dup2\n tag 85:\n /* \"#utility.yul\":1052:1191 *\n tag 58\n jump\t// in\n swap3\n swap2\n jump\t// out\n /* \"#utility.yul\":1197:1671 */\n tag 10:\n /* pop\n pop\n \"#utility.yul\":1265:1271 /* \"#utility.yul\":1273:1279 *∧n 0x00\n */\n dup1\n \"#utility.yul\":1322:1324 0x40\n /* \"#utility.yul\":1310:1319 *∧n /* *∧n dup4\n \"#utility.yul\":1301:1308 */\n dup6\n /* \"#utility.yul\":1297:1320 */\n sub\n /* \"#utility.yul\":1293:1325 */\n slt\n iszero\n tag_87\n jumpi\n /* \"#utility.yul\":1328:1407 *\n tag_88\n tag_51\n jump\t// in\n tag_88:\n tag 87:\n 0x00\n /* /* \"#utility.yul\":1448:1449 */\n \"#utility.yul\":1473:1526 */\n tag 89\n /* \"#utility.yul\":1518:1525 */\n n/8qub /* \"#utility.yul\":1509:1515 */\n dup3\n /* \"#utility.yul\":1498:1507 *\n dup7\n /* \"#utility.yul\":1494:1516 */\n add\n /* \"#utility.yul\":1473:1526 *\n tag_56\n jump\t// /* \"#utility.yul\":1463:1526 /* in\n tag_89:\n *∧n swap3\n pop\n \"#utility.yul\":1419:1536 *∧n pop\n /* \"#utility.yul\":1575:1577 *\n 0x20\n /* \"#utility.yul\":1601:1654 tag 90\n /* \"#utility.yul\":1646:1653 /* */\n */\n dup6\n /* \"#utility.yul\":1637:1643 */\n dup3\n /* \"#utility.yul\":1626:1635 */\n dup7\n \"#utility.yul\":1622:1644 add\n /* \"#utility.yul\":1601:1654 *\n tag_59\n */\n jump\t// in\n tag 90:\n /* \"#utility.yul\":1591:1654 */\n swap2\n pop\n /* \"#utility.yul\":1546:1664 */\n pop\n /* \"#utility.yul\":1197:1671 */\n swap3\n n/aoa swap3\n swap1\n pop\n jump\t// out\n /* \"#utility.yul\":1677:2006 *\\n 0x00\n /* /* \"#utility.yul\":1736:1742 *\n /* \"#utility.yul\":1785:1787 0x20\n \"#utility.yul\":1773:1782 dup3\n /* \"#utility.yul\":1764:1771 dup5\n *∧n */\n \"#utility.yul\":1760:1783 */\n sub\n /* \"#utility.yul\":1756:1788 */\n slt\n /* \"#utility.yul\":1753:1872 */\n iszero\n tag 92\n jumpi\n /* \"#utility.yul\":1791:1870 */\n tag_93\n tag 51\n jump\t// in\n tag_93:\n /* \"#utility.yul\":1753:1872 *∧n 0x00\n tag_92:\n /* \"#utility.yul\":1911:1912 */\n /* \"#utility.yul\":1936:1989 *∧n /* \"#utility.yul\":1981:1988 dup5\n /* \"#utility.yul\":1972:1978 tag_94\n *∧n /* \"#utility.yul\":1961:1970 *\n /* \"#utility.yul\":1957:1979 *\n dup3\n dup6\n add\n /* \"#utility.yul\":1936:1989 tag 59\n jump\t// in\n tag 94:\n /* */\n \"#utility.yul\":1926:1989 */\n /* \"#utility.yul\":1882:1999 *\n swap2\n pop\n pop\n /* /* \"#utility.yul\":1677:2006 *\n swap3\n swap2\n n/qoq jump\t// out\n pop\n \"#utility.yul\":2012:2130 *\n tag_60:\n /* \"#utility.yul\":2099:2123 *\n tag_96\n /* \"#utility.yul\":2117:2122 *\n dup2\n /* \"#utility.yul\":2099:2123 *\n tag 54\n jump\t// in\n tag_96:\n /* \"#utility.yul\":2094:2097 *∧n dup3\n /* \"#utility.yul\":2087:2124 */\n mstore\n /* \"#utility.yul\":2012:2130 jump\t// out\n /* *∧n pop\n pop\n \"#utility.yul\":2136:2254 */\n tag 61:\n /* \"#utility.yul\":2223:2247 */\n tag 98\n /*

\"#utility.yul\":2241:2246 *\n dup2\n /* \"#utility.yul\":2223:2247 *\n tag 57\n jump\t// in\n tag_98:\n /* \"#utility.yul\":2218:2221 *∧n dup3\n /* \"#utility.yul\":2211:2248 *\\n /* \"#utility.yul\":2136:2254 jump\t// out\n /* mstore\n */\n pop\n pop\n \"#utility.yul\":2260:2702 *∧n tag 17:\n /* \"#utility.yul\":2409:2413 *∧n 0x00\n /* \"#utility.yul\":2447:2449 0x60\n /* \"#utility.yul\":2436:2445 /* *∧n */\n dup3\n \"#utility.yul\":2432:2450 *\n add\n /* \"#utility.yul\":2424:2450 *\n swap1\n pop\n /* \"#utility.yul\":2460:2531 *\n tag_100\n /* \"#utility.yul\":2528:2529 *∧n 0x00\n /* add\n \"#utility.yul\":2517:2526 *∧n dup4\n /* \"#utility.yul\":2513:2530 /* \"#utility.yul\":2504:2510 */\n dup7\n /* \"#utility.yul\":2460:2531 *\n tag 60\n iump\t// /* \"#utility.yul\":2541:2613 */\n in\n tag 100:\n tag 101\n /* \"#utility.yul\":2609:2611 dup4\n */\n 0x20\n /* \"#utility.yul\":2598:2607 *\n /* \"#utility.yul\":2594:2612 *\n add\n /* \"#utility.yul\":2585:2591 dup6\n /* \"#utility.yul\":2541:2613 *\n */\n /* tag_61\n jump\t// in\n tag_101:\n /* \"#utility.yul\":2623:2695 *∧n tag 102\n \"#utility.yul\":2691:2693 0x40\n /* \"#utility.yul\":2680:2689 *\n /* *∧n dup4\n \"#utility.yul\":2676:2694 *∧n add\n /* \"#utility.yul\":2667:2673 *∧n dup5\n /* \"#utility.yul\":2623:2695 /* */\n tag_61\n jump\t// in\n tag_102:\n \"#utility.yul\":2260:2702 */\n swap5\n swap4\n pop\n pop\n pop\n pop\n /* \"#utility.yul\":2708:3037 *\n tag_20:\n /* \"#utility.yul\":2767:2773 *\n jump\t// out\n 0x00\n /* \"#utility.yul\":2816:2818 0x20\n /* \"#utility.yul\":2804:2813 /* \"#utility.yul\":2795:2802 *\n dup5\n dup3\n /* \"#utility.yul\":2791:2814 */\n sub\n slt\n /* \"#utility.yul\":2787:2819 *\n /* \"#utility.yul\":2784:2903 *\n iszero\n tag_104\n jumpi\n /* \"#utility.yul\":2822:2901 *\n tag_105\n tag_51\n jump\t// in\n tag_105:\n /* \"#utility.yul\":2784:2903 *\n tag_104:\n /* \"#utility.yul\":2942:2943 *\n 0x00\n /* \"#utility.yul\":2967:3020 *∧n tag_106\n /* \"#utility.yul\":3012:3019 *∧n /* \"#utility.yul\":3003:3009 /* \"#utility.yul\":2992:3001 dup5\n *∧n dup3\n *∧n dup6\n /* \"#utility.yul\":2988:3010 *∧n add\n /* \"#utility.yul\":2967:3020 */\n

tag_56\n jump\t// in\n tag_106:\n /* \"#utility.yul\":2957:3020 */\n swap2\n pop\n /* \"#utility.yul\":2913:3030 */\n pop\n /* \"#utility.yul\":2708:3037 */\n swap3\n jump\t// out\n /* swap2\n pop\n pop\n /* \"#utility.yul\":3043:3375 */\n tag 23:\n \"#utility.yul\":3164:3168 *∧n 0x00\n /* \"#utility.yul\":3202:3204 */\n 0x40\n /* \"#utility.yul\":3191:3200 /* \"#utility.yul\":3187:3205 /* *∧n dup3\n */\n add\n \"#utility.yul\":3179:3205 */\n swap1\n pop\n /* \"#utility.yul\":3215:3286 */\n /* \"#utility.yul\":3283:3284 *\n 0x00\n /* \"#utility.yul\":3272:3281 tag_108\n */\n dup4\n /* \"#utility.yul\":3268:3285 *\n add\n /* \"#utility.yul\":3259:3265 *\n dup6\n /* /* \"#utility.yul\":3215:3286 tag 61\n */\n jump\t// in\n tag 108:\n /* \"#utility.yul\":3364:3366 /* \"#utility.yul\":3296:3368 */\n tag 109\n *∧n 0x20\n \"#utility.yul\":3353:3362 dup4\n /* \"#utility.yul\":3349:3367 add\n /* *∧n */\n \"#utility.yul\":3340:3346 *\n dup5\n tag_61\n /* \"#utility.yul\":3296:3368 */\n jump\t// /* \"#utility.yul\":3043:3375 *\n in\n tag 109:\n swap4\n swap3\n pop\n pop\n /* jump\t// out\n /* \"#utility.yul\":3381:3603 *∧n tag 27:\n pop\n \"#utility.yul\":3474:3478 *∧n 0x00\n /* \"#utility.yul\":3512:3514 *∧n 0x20\n /* \"#utility.yul\":3501:3510 *∧n dup3\n /* \"#utility.yul\":3497:3515 */\n add\n \"#utility.yul\":3489:3515 /* \"#utility.yul\":3525:3596 *∧n swap1\n pop\n *∧n /* \"#utility.yul\":3593:3594 *\n tag_111\n 0x00\n /* \"#utility.yul\":3582:3591 */\n /* \"#utility.yul\":3578:3595 *\n add\n /* \"#utility.yul\":3569:3575 */\n dup4\n dup5\n /* \"#utility.yul\":3525:3596 tag 61\n /* *∧n jump\t// in\n tag 111:\n swap3\n /* \"#utility.yul\":3381:3603 *\n swap2\n pop\n jump\t// out\n pop\n \"#utility.yul\":3609:3717 *\n tag_62:\n /* \"#utility.yul\":3686:3710 *\n tag_113\n /* \"#utility.yul\":3704:3709 */\n dup2\n /* \"#utility.yul\":3686:3710 *\n tag 57\n jump\t// in\n tag_113:\n /* \"#utility.yul\":3681:3684 *∧n dup3\n /* \"#utility.yul\":3674:3711 */\n /* \"#utility.yul\":3609:3717 jump\t// out\n /* mstore\n *∧n pop\n pop\n \"#utility.yul\":3807:4326 *∧n tag 63:\n /* \"#utility.yul\":3946:3950 *∧n 0x40\n /*

/* \"#utility.yul\":3941:3944 *∧n dup3\n /* \"#utility.yul\":3937:3951 */\n add\n \"#utility.yul\":4043:4047 *∧n 0x00\n /* \"#utility.yul\":4036:4041 */\n dup3\n \"#utility.yul\":4032:4048 /* \"#utility.yul\":4026:4049 *∧n add\n *∧n mload\n \"#utility.yul\":4062:4125 */\n tag 115\n /* \"#utility.yul\":4119:4123 *∧n 0x00\n \"#utility.yul\":4114:4117 dup6\n /* \"#utility.yul\":4110:4124 add\n /* *∧n */\n \"#utility.yul\":4096:4108 */\n dup3\n /* \"#utility.yul\":4062:4125 *\n tag_62\n jump\t// tag_115:\n /* \"#utility.yul\":3961:4135 *∧n pop\n /* \"#utility.yul\":4227:4231 in\n *∧n 0x20\n /* \"#utility.yul\":4220:4225 *\\n dup3\n /* \"#utility.yul\":4216:4232 *∧n add\n /* \"#utility.yul\":4210:4233 */\n mload\n /* \"#utility.yul\":4246:4309 */\n /* \"#utility.yul\":4303:4307 *\n */\n tag_116\n 0x20\n /* \"#utility.yul\":4298:4301 add\n dup6\n /* \"#utility.yul\":4294:4308 *\n /* \"#utility.yul\":4280:4292 *\n dup3\n /* \"#utility.yul\":4246:4309 tag_62\n /* */\n jump\t// in\n tag_116:\n /* \"#utility.yul\":3915:4326 /* \"#utility.yul\":4145:4319 *∧n pop\n *∧n pop\n \"#utility.yul\":3807:4326 */\n pop\n pop\n jump\t// out\n /* \"#utility.yul\":4332:4638 *∧n tag 32:\n /* \"#utility.yul\":4467:4471 *∧n 0x00\n /* \"#utility.yul\":4505:4507 *\n 0x40\n dup3\n /* \"#utility.yul\":4494:4503 *\n /* \"#utility.yul\":4490:4508 */\n add\n /* \"#utility.yul\":4482:4508 *\n swap1\n pop\n /* \"#utility.yul\":4518:4631 */\n /* \"#utility.yul\":4628:4629 *∧n 0x00\n tag 118\n /* \"#utility.yul\":4617:4626 *\\n dup4\n /* \"#utility.yul\":4613:4630 *\\n add\n /* \"#utility.yul\":4604:4610 *\n dup5\n /* /* \"#utility.yul\":4518:4631 tag 63\n *∧n jump\t// in\n tag 118:\n /* \"#utility.yul\":4332:4638 swap3\n swap2\n pop\n jump\t// out\n *∧n pop\n \"#utility.yul\":4644:4813 *∧n tag_64:\n /* \"#utility.yul\":4728:4739 */\n 0x00\n \"#utility.yul\":4762:4768 */\n dup3\n /* \"#utility.yul\":4757:4760 */\n dup3\n \"#utility.yul\":4750:4769 */\n mstore\n /* \"#utility.yul\":4802:4806 */\n 0x20\n /* \"#utility.yul\":4797:4800 /* \"#utility.yul\":4793:4807 */\n add\n /* *∧n dup3\n \"#utility.yul\":4778:4807 *∧n swap1\n pop\n /* \"#utility.yul\":4644:4813 *\\n swap3\n

*/\n

/* \"#utility.yul\":4959:4990

0x496e73756666696369656e74206d61696e6e65742062616c616e63652e000000\n /* \"#utility.yul\":4955:4956 0x00\n /* \"#utility.yul\":4947:4953 dup3\n *∧n *∧n \"#utility.yul\":4943:4957 add\n /* \"#utility.yul\":4936:4991 /* *∧n *∧n mstore\n \"#utility.yul\":4819:4998 /* \"#utility.yul\":5004:5370 */\n pop\n jump\t// out\n */\n /* \"#utility.yul\":5146:5149 0x00\n /* \"#utility.yul\":5167:5234 tag_66:\n */\n */\n tag 122\n /* \"#utility.yul\":5231:5233 *∧n 0x1d\n /* \"#utility.yul\":5226:5229 */\n /* dup4\n /* \"#utility.yul\":5167:5234 tag 64\n *∧n jump\t// in\n tag 122:\n \"#utility.yul\":5160:5234 /* \"#utility.yul\":5243:5336 *∧n swap2\n pop\n /* \"#utility.yul\":5332:5335 /* \"#utility.yul\":5243:5336 */\n tag 123\n *∧n dup3\n /* \"#utility.yul\":5361:5363 0x20\n /* tag_65\n jump\t// in\n tag_123:\n *∧n \"#utility.yul\":5356:5359 *∧n dup3\n /* \"#utility.yul\":5352:5364 */\n add\n \"#utility.yul\":5345:5364 */\n swap1\n pop\n /* \"#utility.yul\":5004:5370 */\n swap2\n swap1\n pop\n jump\t// out\n /* \"#utility.yul\":5376:5795 *∧n tag 36:\n \"#utility.yul\":5542:5546 */\n 0x00\n /* \"#utility.yul\":5580:5582 */\n 0x20\n /* \"#utility.yul\":5569:5578 /* \"#utility.yul\":5565:5583 add\n /* *∧n dup3\n */\n \"#utility.yul\":5557:5583 swap1\n /* \"#utility.yul\":5629:5638 pop\n */\n dup2\n */\n /* \"#utility.yul\":5623:5627 */\n dup2\n /* \"#utility.yul\":5619:5639 *\n sub\n /* \"#utility.yul\":5615:5616 /* \"#utility.yul\":5604:5613 *∧n 0x00\n dup4\n /* \"#utility.yul\":5600:5617 add\n /* \"#utility.yul\":5593:5640 mstore\n */\n \"#utility.yul\":5657:5788 *∧n tag_125\n /* \"#utility.yul\":5783:5787 */\n dup2\n \"#utility.yul\":5657:5788 */\n tag_66\n jump\t// in\n tag_125:\n \"#utility.yul\":5649:5788 *∧n swap1\n pop\n /* \"#utility.yul\":5376:5795 *\n swap2\n jump\t// out\n /* \"#utility.yul\":5801:5981 *∧n swap1\n pop\n tag 67:\n \"#utility.yul\":5849:5926 *∧n

```
/* \"#utility.yul\":6341:6342 */\n
                                      dup3\n
                                                  /* \"#utility.yul\":6338:6348 *\n
                                                                                      gt\n
                                                                      /* \"#utility.yul\":6351:6369
\"#utility.yul\":6335:6371 */\n
                                iszero\n
                                            tag_135\n
                                                         jumpi\n
*/\n
                                                               /* \"#utility.yul\":6335:6371
       tag_136\n
                     tag 67\n
                                 jump\t// in\n
                                                tag 136:\n
                /* \"#utility.yul\":6187:6378 *\n
                                                    swap3\n
                                                                swap2\n
tag 135:\n
                                                                             pop\n
                                                                                       pop\n
jump\t//
                      out\n\n
                                                                                        auxdata:
0xa26469706673582212200a5a0f838d14ab827bd80c3be88fe223705850e5e032f9b180cc58570fa6
31ed64736f6c63430008190033\n}\n",
```

```
"bytecode": {
    "functionDebugData": {
        "@_60": {
            "entryPoint": null,
            "id": 60,
            "parameterSlots": 0,
            "returnSlots": 0
        }
    },
    "generatedSources": [],
    "linkReferences": {},
```

"object":

565b60405180910390f35b6100c160048036038101906100bc9190610671565b610478565b604051 6100cf92919061069c565b60405180910390f35b6100e0610497565b6040516100ed91906106c3565 b60405180910390f35b610110600480360381019061010b9190610671565b6104a3565b604051610 fffffffffffffff1681526020019081526020015f205f015410156101a7576040517f08c379a0000000000 16815260200183815260200183815250908060018154018082558091505060019003905f5260205f 206001015460405161041892919061069c565b60405180910390a25050565b60018181548110610 433575f80fd5b905f5260205f2090600302015f91509050805f015f9054906101000a900473ffffffffffff ffffffffffffffffffffffffffff16908060010154908060020154905083565b5f602052805f5260405f205f915090508 05f0154908060010154905082565b5f600180549050905090565b6104ab61050c565b5f808373ffffffff 0160405290815f82015481526020016001820154815250509050919050565b604051806040016040 61055182610528565b9050919050565b61056181610547565b811461056b575f80fd5b50565b5f813

5905061057c81610558565b92915050565b5f819050919050565b61059481610582565b811461059 e575f80fd5b50565b5f813590506105af8161058b565b92915050565b5f80604083850312156105cb5 76105ca610524565b5b5f6105d88582860161056e565b92505060206105e9858286016105a1565b9 150509250929050565b5f6020828403121561060857610607610524565b5b5f61061584828501610 5a1565b91505092915050565b61062781610547565b82525050565b61063681610582565b825250 50565b5f60608201905061064f5f83018661061e565b61065c602083018561062d565b61066960408 3018461062d565b949350505050565b5f6020828403121561068657610685610524565b5b5f61069 38482850161056e565b91505092915050565b5f6040820190506106af5f83018561062d565b6106bc 602083018461062d565b9392505050565b5f6020820190506106d65f83018461062d565b92915050 565b6106e581610582565b82525050565b604082015f8201516106ff5f8501826106dc565b5060208 2015161071260208501826106dc565b50505050565b5f60408201905061072b5f8301846106eb565 b92915050565b5f82825260208201905092915050565b7f496e73756666696369656e74206d61696 e6e65742062616c616e63652e0000005f82015250565b5f610775601d83610731565b91506107808 2610741565b602082019050919050565b5f6020820190508181035f8301526107a281610769565b9 f52601160045260245ffd5b5f6107e082610582565b91506107eb83610582565b9250828203905081 811115610803576108026107a9565b5b92915050565b5f61081382610582565b915061081e836105 82565b9250828201905080821115610836576108356107a9565b5b9291505056fea2646970667358 2212200a5a0f838d14ab827bd80c3be88fe223705850e5e032f9b180cc58570fa631ed64736f6c6343 0008190033".

"opcodes": "PUSH1 0x80 PUSH1 0x40 MSTORE CALLVALUE DUP1 ISZERO PUSH1 0xE JUMPI PUSH0 DUP1 REVERT JUMPDEST POP PUSH2 0x3E8 PUSH0 DUP1 **CALLER** PUSH₂₀ AND PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD DUP2 SWAP1 **SSTORE** POP PUSH2 0x1F4 PUSH0 DUP₁ **CALLER** PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD DUP2 SWAP1 SSTORE POP PUSH2 0x872 DUP1 PUSH2 0xA7 PUSH0 CODECOPY PUSH0 RETURN INVALID PUSH1 0x80 PUSH1 0x40 MSTORE CALLVALUE DUP1 ISZERO PUSH2 0xF JUMPI PUSH0 DUP1 REVERT JUMPDEST POP PUSH1 0x4 CALLDATASIZE LT PUSH2 0x55 JUMPI PUSH0 CALLDATALOAD PUSH1 0xE0 SHR DUP1 PUSH4 0x67844D2B EQ PUSH2 0x59 JUMPI DUP1 PUSH4 0x9ACE38C2 EQ PUSH2 0x75 JUMPI DUP1 PUSH4 0xB1E1C370 EQ PUSH2 0xA7 JUMPI DUP1 PUSH4 0xB5C604FF EQ PUSH2 0xD8 JUMPI DUP1 PUSH4 0xF7CD6AF9 EQ PUSH2 0xF6 JUMPI JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH2 0x73 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x6E SWAP2 SWAP1 PUSH2 0x5B5 JUMP JUMPDEST PUSH2 0x126 JUMP JUMPDEST STOP JUMPDEST PUSH2 0x8F PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x8A SWAP2 SWAP1 PUSH2 0x5F3 JUMP JUMPDEST PUSH2 0x424 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x9E SWAP4 SWAP3 SWAP2 SWAP1 PUSH2 0x63C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xC1 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0xBC SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x478 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xCF SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xE0 PUSH2 0x497 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xED SWAP2 SWAP1 PUSH2 0x6C3 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0x110 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x10B SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x4A3 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x11D SWAP2 SWAP1 PUSH2 0x718 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST DUP1

0x20 ADD SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD SLOAD LT **ISZERO** PUSH2 0x1A7 JUMPI PUSH1 0x40MLOAD PUSH32 PUSH1 0x4 ADD PUSH2 0x19E SWAP1 PUSH2 0x78B JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 REVERT JUMPDEST DUP1 PUSH0 DUP1 DUP5 PUSH20 AND PUSH20 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x1F4 SWAP2 SWAP1 PUSH2 0x7D6 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP DUP1 PUSH0 DUP1 DUP5 PUSH₂₀ AND PUSH20 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x249 SWAP2 SWAP1 PUSH2 0x809 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP PUSH1 0x1 PUSH1 0x40 MLOAD DUP1 PUSH1 0x60 ADD PUSH1 AND DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE POP SWAP1 DUP1 PUSH1 0x1 DUP2 SLOAD ADD DUP1 DUP3 SSTORE DUP1 SWAP2 POP POP PUSH1 0x1 SWAP1 SUB SWAP1 PUSH0 MSTORE PUSH1 0x20 PUSH0 KECCAK256 SWAP1 PUSH1 0x3 MUL ADD PUSH0 SWAP1 SWAP2 SWAP1 SWAP2 SWAP1 SWAP2 POP PUSH0 DUP3 ADD MLOAD DUP2 PUSH0 ADD PUSH0 PUSH2 0x100 EXP DUP2 SWAP1 SSTORE POP PUSH1 0x20 DUP3 ADD MLOAD DUP2 PUSH1 0x1 ADD SSTORE PUSH1 0x40 DUP3 ADD MLOAD DUP2 PUSH1 0x2 ADD SSTORE POP POP DUP2 PUSH20

PUSH20

SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE SWAP1 DUP2 PUSH0 DUP3 ADD SLOAD DUP2 MSTORE PUSH1 0x20 ADD PUSH1 0x1 DUP3 ADD SLOAD DUP2 MSTORE POP POP SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE DUP1 PUSH0 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 DUP2 MSTORE POP SWAP1 JUMP JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH0 PUSH20 0xffffffffffffffffffffffffffffff DUP3 AND SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH2 0x551 DUP3 PUSH2 0x528 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x561 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP2 EQ PUSH2 0x56B JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSHO DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x57C DUP2 PUSH2 0x558 JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP2 SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x594 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP2 EQ PUSH2 0x59E JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSH0 DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x5AF DUP2 PUSH2 0x58B JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP1 PUSH1 0x40 DUP4 DUP6 SUB SLT ISZERO PUSH2 0x5CB JUMPI PUSH2 0x5CA PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x5D8 DUP6 DUP3 DUP7 ADD PUSH2 0x56E JUMP JUMPDEST SWAP3 POP POP PUSH1 0x20 PUSH2 0x5E9 DUP6 DUP3 DUP7 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 POP SWAP3 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x608 JUMPI PUSH2 0x607 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x615 DUP5 DUP3 DUP6 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x627 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH2 0x636 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH0 PUSH1 0x60 DUP3 ADD SWAP1 POP PUSH2 0x64F PUSH0 DUP4 ADD DUP7 PUSH2 0x61E JUMP JUMPDEST PUSH2 0x65C PUSH1 0x20 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x669 PUSH1 0x40 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP5 SWAP4 POP POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x686 JUMPI PUSH2 0x685 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x693 DUP5 DUP3 DUP6 ADD PUSH2 0x56E JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x6AF PUSH0 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x6BC PUSH1 0x20 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP4 SWAP3 POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP PUSH2 0x6D6 PUSH0 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x6E5 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH1 0x40 DUP3 ADD PUSH0 DUP3 ADD MLOAD PUSH2 0x6FF PUSH0 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP PUSH1 0x20 DUP3 ADD MLOAD PUSH2 0x712 PUSH1 0x20 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x72B PUSH0 DUP4 ADD DUP5 PUSH2 0x6EB JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP3 DUP3 MSTORE PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH32 0x496E73756666696369656E74206D61696E6E65742062616C616E63652E000000 PUSH0 DUP3 ADD MSTORE POP JUMP JUMPDEST PUSH0 PUSH2 0x775 PUSH1 0x1D DUP4 PUSH2 0x731 JUMP JUMPDEST SWAP2 POP PUSH2 0x780 DUP3 PUSH2 0x741 JUMP JUMPDEST PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP DUP2 DUP2 SUB PUSH0 DUP4 ADD MSTORE PUSH2 0x7A2 DUP2 PUSH2 0x769 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH32 PUSH0 MSTORE PUSH1 0x11 PUSH1 0x4 MSTORE PUSH1 0x24 PUSH0 REVERT JUMPDEST PUSH0 PUSH2 0x7E0 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP2 POP PUSH2 0x7EB DUP4 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 SUB SWAP1 POP DUP2 DUP2 GT ISZERO PUSH2 0x803 JUMPI PUSH2 0x802 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH2 0x813 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 ADD SWAP1 POP DUP1 DUP3 GT ISZERO PUSH2 0x836 JUMPI PUSH2 0x835 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP INVALID LOG2 PUSH5 0x6970667358 0x22 SLT KECCAK256 EXP GAS 0xF DUP4 DUP14 EQ 0xAB DUP3 PUSH28 0xD80C3BE88FE223705850E5E032F9B180CC58570FA631ED64736F6C63 NUMBER STOP ADDMOD NOT STOP CALLER ".

```
"sourceMap":
"393:2830:0:-:0;;;1456:269;;;;;;;1608:4;1571:7;:19;1579:10;1571:19;;;;;;;;;;;;;;;;;1687:3;165
0:7;:19;1658:10;1650:19;;;;;;;;34;;:40;;;393:2830;;;;;
                 },
                 "deployedBytecode": {
                    "functionDebugData": {
                      "@getLedger_135": {
                         "entryPoint": 1187,
                        "id": 135,
                         "parameterSlots": 1,
                        "returnSlots": 1
                      },
                      "@getTotalTransactions_145": {
                         "entryPoint": 1175,
                         "id": 145,
```

"parameterSlots": 0,

```
"returnSlots": 1
},
"@ledgers_19": {
  "entryPoint": 1144,
  "id": 19,
  "parameterSlots": 0,
  "returnSlots": 0
},
"@performTransaction_121": {
  "entryPoint": 294,
  "id": 121,
  "parameterSlots": 2,
  "returnSlots": 0
},
"@transactions_23": {
  "entryPoint": 1060,
  "id": 23,
  "parameterSlots": 0,
  "returnSlots": 0
},
"abi_decode_t_address": {
  "entryPoint": 1390,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
```

```
"abi_decode_t_uint256": {
  "entryPoint": 1441,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"abi_decode_tuple_t_address": {
  "entryPoint": 1649,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"abi_decode_tuple_t_addresst_uint256": {
  "entryPoint": 1461,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 2
},
"abi_decode_tuple_t_uint256": {
  "entryPoint": 1523,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"abi_encode_t_address_to_t_address_fromStack": {
  "entryPoint": 1566,
```

```
"id": null,
                         "parameterSlots": 2,
                         "returnSlots": 0
                      },
"abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45_to_t_string_memory_ptr_fromStack": {
                         "entryPoint": 1897,
                         "id": null,
                         "parameterSlots": 1,
                         "returnSlots": 1
                      },
"abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack":
{
                         "entryPoint": 1771,
                         "id": null,
                         "parameterSlots": 2,
                         "returnSlots": 0
                      },
                      "abi_encode_t_uint256_to_t_uint256": {
                         "entryPoint": 1756,
                         "id": null,
                         "parameterSlots": 2,
                         "returnSlots": 0
                      },
```

```
"entryPoint": 1581,
                        "id": null,
                        "parameterSlots": 2,
                        "returnSlots": 0
                      },
"abi_encode_tuple_t_address_t_uint256_t_uint256__to_t_address_t_uint256_t_uint256__fromStack
reversed": {
                        "entryPoint": 1596,
                        "id": null,
                        "parameterSlots": 4,
                        "returnSlots": 1
                      },
"abi_encode_tuple_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc11892297711
67008cf45__to_t_string_memory_ptr__fromStack_reversed": {
                        "entryPoint": 1931,
                        "id": null,
                        "parameterSlots": 1,
                        "returnSlots": 1
                      },
"abi_encode_tuple_t_struct$_Ledger_$7_memory_ptr__to_t_struct$_Ledger_$7_memory_ptr__fro
mStack_reversed": {
                        "entryPoint": 1816,
```

"abi_encode_t_uint256_to_t_uint256_fromStack": {

```
"id": null,
                         "parameterSlots": 2,
                         "returnSlots": 1
                       },
                       "abi_encode_tuple_t_uint256__to_t_uint256__fromStack_reversed": {
                         "entryPoint": 1731,
                         "id": null,
                         "parameterSlots": 2,
                         "returnSlots": 1
                       },
"abi_encode_tuple_t_uint256_t_uint256__to_t_uint256_t_uint256__fromStack_reversed": {
                         "entryPoint": 1692,
                         "id": null,
                         "parameterSlots": 3,
                         "returnSlots": 1
                       },
                       "allocate_unbounded": {
                         "entryPoint": null,
                         "id": null,
                         "parameterSlots": 0,
                         "returnSlots": 1
                       },
                       "array_storeLengthForEncoding_t_string_memory_ptr_fromStack": {
                         "entryPoint": 1841,
                         "id": null,
```

```
"parameterSlots": 2,
  "returnSlots": 1
},
"checked_add_t_uint256": {
  "entryPoint": 2057,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"checked_sub_t_uint256": {
  "entryPoint": 2006,
  "id": null,
  "parameterSlots": 2,
  "returnSlots": 1
},
"cleanup_t_address": {
  "entryPoint": 1351,
  "id": null,
  "parameterSlots": 1,
  "returnSlots": 1
},
"cleanup_t_uint160": {
  "entryPoint": 1320,
  "id": null,
  "parameterSlots": 1,
  "returnSlots": 1
```

```
"cleanup_t_uint256": {
                         "entryPoint": 1410,
                         "id": null,
                         "parameterSlots": 1,
                         "returnSlots": 1
                      },
                      "panic_error_0x11": {
                         "entryPoint": 1961,
                         "id": null,
                         "parameterSlots": 0,
                         "returnSlots": 0
                      },
"revert_error_c1322bf8034eace5e0b5c7295db60986aa89aae5e0ea0873e4689e076861a5db": {
                         "entryPoint": null,
                         "id": null,
                         "parameterSlots": 0,
                         "returnSlots": 0
                      },
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b": {
                         "entryPoint": 1316,
                         "id": null,
                         "parameterSlots": 0,
                         "returnSlots": 0
```

},

},

{

"generatedSources": [

"nativeSrc": "0:6381:1",

"ast": {

}, "store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf 45": { "entryPoint": 1857, "id": null, "parameterSlots": 1, "returnSlots": 0 }, "validator_revert_t_address": { "entryPoint": 1368, "id": null, "parameterSlots": 1, "returnSlots": 0 }, "validator_revert_t_uint256": { "entryPoint": 1419, "id": null, "parameterSlots": 1, "returnSlots": 0 }

```
"nodeType": "YulBlock",
"src": "0:6381:1",
"statements": [
  {
     "body": {
        "nativeSrc": "47:35:1",
       "nodeType": "YulBlock",
        "src": "47:35:1",
        "statements": [
          {
             "nativeSrc": "57:19:1",
             "nodeType": "YulAssignment",
             "src": "57:19:1",
             "value": {
               "arguments": [
                 {
                    "kind": "number",
                    "nativeSrc": "73:2:1",
                    "nodeType": "YulLiteral",
                    "src": "73:2:1",
                    "type": "",
                    "value": "64"
                 }
               ],
               "functionName": {
                  "name": "mload",
```

```
"nativeSrc": "67:5:1",
             "nodeType": "Yulldentifier",
             "src": "67:5:1"
          },
          "nativeSrc": "67:9:1",
          "nodeType": "YulFunctionCall",
          "src": "67:9:1"
       },
        "variableNames": [
          {
             "name": "memPtr",
             "nativeSrc": "57:6:1",
             "nodeType": "Yulldentifier",
             "src": "57:6:1"
          }
       ]
     }
  ]
},
"name": "allocate_unbounded",
"nativeSrc": "7:75:1",
"nodeType": "YulFunctionDefinition",
"returnVariables": [
  {
     "name": "memPtr",
     "nativeSrc": "40:6:1",
```

```
"nodeType": "YulTypedName",
       "src": "40:6:1",
       "type": ""
     }
  ],
  "src": "7:75:1"
},
{
  "body": {
     "nativeSrc": "177:28:1",
     "nodeType": "YulBlock",
     "src": "177:28:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "kind": "number",
                  "nativeSrc": "194:1:1",
                  "nodeType": "YulLiteral",
                  "src": "194:1:1",
                  "type": "",
                  "value": "0"
               },
               {
                  "kind": "number",
```

```
"nativeSrc": "197:1:1",
                "nodeType": "YulLiteral",
                "src": "197:1:1",
                "type": "",
                "value": "0"
             }
          ],
          "functionName": {
             "name": "revert",
             "nativeSrc": "187:6:1",
             "nodeType": "Yulldentifier",
             "src": "187:6:1"
          },
          "nativeSrc": "187:12:1",
          "nodeType": "YulFunctionCall",
          "src": "187:12:1"
        },
        "nativeSrc": "187:12:1",
        "nodeType": "YulExpressionStatement",
        "src": "187:12:1"
     }
  ]
},
```

"name":

"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",

"nativeSrc": "88:117:1",

```
"nodeType": "YulFunctionDefinition",
  "src": "88:117:1"
},
{
  "body": {
     "nativeSrc": "300:28:1",
     "nodeType": "YulBlock",
     "src": "300:28:1",
     "statements": [
        {
          "expression": {
             "arguments": [
               {
                  "kind": "number",
                  "nativeSrc": "317:1:1",
                  "nodeType": "YulLiteral",
                  "src": "317:1:1",
                  "type": "",
                  "value": "0"
               },
               {
                  "kind": "number",
                  "nativeSrc": "320:1:1",
                  "nodeType": "YulLiteral",
                  "src": "320:1:1",
                  "type": "",
```

```
}
                                          ],
                                          "functionName": {
                                             "name": "revert",
                                             "nativeSrc": "310:6:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "310:6:1"
                                          },
                                          "nativeSrc": "310:12:1",
                                          "nodeType": "YulFunctionCall",
                                          "src": "310:12:1"
                                       },
                                        "nativeSrc": "310:12:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "310:12:1"
                                     }
                                  ]
                                },
                                                                                            "name":
"revert_error_c1322bf8034eace5e0b5c7295db60986aa89aae5e0ea0873e4689e076861a5db",
                                "nativeSrc": "211:117:1",
                                "nodeType": "YulFunctionDefinition",
                                "src": "211:117:1"
                              },
                              {
```

"value": "0"

```
"body": {
  "nativeSrc": "379:81:1",
  "nodeType": "YulBlock",
  "src": "379:81:1",
  "statements": [
    {
       "nativeSrc": "389:65:1",
       "nodeType": "YulAssignment",
       "src": "389:65:1",
       "value": {
         "arguments": [
           {
              "name": "value",
              "nativeSrc": "404:5:1",
              "nodeType": "Yulldentifier",
              "src": "404:5:1"
           },
           {
              "kind": "number",
              "nativeSrc": "411:42:1",
              "nodeType": "YulLiteral",
              "src": "411:42:1",
              "type": "",
              }
         ],
```

```
"functionName": {
             "name": "and",
             "nativeSrc": "400:3:1",
             "nodeType": "Yulldentifier",
             "src": "400:3:1"
          },
          "nativeSrc": "400:54:1",
          "nodeType": "YulFunctionCall",
          "src": "400:54:1"
       },
       "variableNames": [
          {
             "name": "cleaned",
             "nativeSrc": "389:7:1",
             "nodeType": "Yulldentifier",
             "src": "389:7:1"
          }
       ]
     }
  ]
},
"name": "cleanup_t_uint160",
"nativeSrc": "334:126:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
```

```
"name": "value",
       "nativeSrc": "361:5:1",
       "nodeType": "YulTypedName",
       "src": "361:5:1",
       "type": ""
    }
  ],
  "returnVariables": [
    {
       "name": "cleaned",
       "nativeSrc": "371:7:1",
       "nodeType": "YulTypedName",
       "src": "371:7:1",
       "type": ""
    }
  ],
  "src": "334:126:1"
},
{
  "body": {
     "nativeSrc": "511:51:1",
     "nodeType": "YulBlock",
     "src": "511:51:1",
     "statements": [
       {
          "nativeSrc": "521:35:1",
```

```
"nodeType": "YulAssignment",
"src": "521:35:1",
"value": {
  "arguments": [
    {
       "name": "value",
       "nativeSrc": "550:5:1",
       "nodeType": "Yulldentifier",
       "src": "550:5:1"
    }
  ],
  "functionName": {
     "name": "cleanup_t_uint160",
     "nativeSrc": "532:17:1",
     "nodeType": "Yulldentifier",
     "src": "532:17:1"
  },
  "nativeSrc": "532:24:1",
  "nodeType": "YulFunctionCall",
  "src": "532:24:1"
},
"variableNames": [
  {
     "name": "cleaned",
     "nativeSrc": "521:7:1",
     "nodeType": "Yulldentifier",
```

```
"src": "521:7:1"
          }
       ]
     }
  ]
},
"name": "cleanup_t_address",
"nativeSrc": "466:96:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "493:5:1",
     "nodeType": "YulTypedName",
     "src": "493:5:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "cleaned",
     "nativeSrc": "503:7:1",
     "nodeType": "YulTypedName",
     "src": "503:7:1",
     "type": ""
  }
```

```
],
  "src": "466:96:1"
},
{
  "body": {
     "nativeSrc": "611:79:1",
     "nodeType": "YulBlock",
     "src": "611:79:1",
     "statements": [
        {
          "body": {
             "nativeSrc": "668:16:1",
             "nodeType": "YulBlock",
             "src": "668:16:1",
             "statements": [
               {
                  "expression": {
                     "arguments": [
                       {
                          "kind": "number",
                          "nativeSrc": "677:1:1",
                          "nodeType": "YulLiteral",
                          "src": "677:1:1",
                          "type": "",
                          "value": "0"
                       },
```

```
{
               "kind": "number",
               "nativeSrc": "680:1:1",
               "nodeType": "YulLiteral",
               "src": "680:1:1",
               "type": "",
               "value": "0"
            }
          ],
          "functionName": {
             "name": "revert",
             "nativeSrc": "670:6:1",
             "nodeType": "Yulldentifier",
             "src": "670:6:1"
          },
          "nativeSrc": "670:12:1",
          "nodeType": "YulFunctionCall",
          "src": "670:12:1"
       },
       "nativeSrc": "670:12:1",
       "nodeType": "YulExpressionStatement",
       "src": "670:12:1"
     }
  1
},
"condition": {
```

```
"arguments": [
  {
     "arguments": [
       {
          "name": "value",
          "nativeSrc": "634:5:1",
          "nodeType": "Yulldentifier",
          "src": "634:5:1"
       },
       {
          "arguments": [
            {
               "name": "value",
               "nativeSrc": "659:5:1",
               "nodeType": "Yulldentifier",
               "src": "659:5:1"
            }
         ],
          "functionName": {
            "name": "cleanup_t_address",
            "nativeSrc": "641:17:1",
            "nodeType": "Yulldentifier",
            "src": "641:17:1"
          },
          "nativeSrc": "641:24:1",
          "nodeType": "YulFunctionCall",
```

```
}
       ],
       "functionName": {
          "name": "eq",
          "nativeSrc": "631:2:1",
          "nodeType": "Yulldentifier",
          "src": "631:2:1"
       },
       "nativeSrc": "631:35:1",
       "nodeType": "YulFunctionCall",
       "src": "631:35:1"
     }
  ],
  "functionName": {
     "name": "iszero",
     "nativeSrc": "624:6:1",
     "nodeType": "Yulldentifier",
     "src": "624:6:1"
  },
  "nativeSrc": "624:43:1",
  "nodeType": "YulFunctionCall",
  "src": "624:43:1"
},
"nativeSrc": "621:63:1",
"nodeType": "Yullf",
```

"src": "641:24:1"

```
"src": "621:63:1"
       }
     ]
  },
  "name": "validator_revert_t_address",
  "nativeSrc": "568:122:1",
  "nodeType": "YulFunctionDefinition",
  "parameters": [
     {
       "name": "value",
       "nativeSrc": "604:5:1",
       "nodeType": "YulTypedName",
       "src": "604:5:1",
       "type": ""
    }
  ],
  "src": "568:122:1"
},
{
  "body": {
     "nativeSrc": "748:87:1",
     "nodeType": "YulBlock",
     "src": "748:87:1",
     "statements": [
       {
          "nativeSrc": "758:29:1",
```

```
"nodeType": "YulAssignment",
"src": "758:29:1",
"value": {
  "arguments": [
    {
       "name": "offset",
       "nativeSrc": "780:6:1",
       "nodeType": "Yulldentifier",
       "src": "780:6:1"
    }
  ],
  "functionName": {
     "name": "calldataload",
     "nativeSrc": "767:12:1",
     "nodeType": "Yulldentifier",
     "src": "767:12:1"
  },
  "nativeSrc": "767:20:1",
  "nodeType": "YulFunctionCall",
  "src": "767:20:1"
},
"variableNames": [
  {
     "name": "value",
     "nativeSrc": "758:5:1",
     "nodeType": "Yulldentifier",
```

```
"src": "758:5:1"
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value",
          "nativeSrc": "823:5:1",
          "nodeType": "Yulldentifier",
          "src": "823:5:1"
       }
     ],
     "functionName": {
       "name": "validator_revert_t_address",
       "nativeSrc": "796:26:1",
       "nodeType": "Yulldentifier",
       "src": "796:26:1"
     },
     "nativeSrc": "796:33:1",
     "nodeType": "YulFunctionCall",
     "src": "796:33:1"
  },
  "nativeSrc": "796:33:1",
  "nodeType": "YulExpressionStatement",
```

```
"src": "796:33:1"
     }
  ]
},
"name": "abi_decode_t_address",
"nativeSrc": "696:139:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "offset",
     "nativeSrc": "726:6:1",
     "nodeType": "YulTypedName",
     "src": "726:6:1",
     "type": ""
  },
  {
     "name": "end",
     "nativeSrc": "734:3:1",
     "nodeType": "YulTypedName",
     "src": "734:3:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "value",
```

```
"nativeSrc": "742:5:1",
       "nodeType": "YulTypedName",
       "src": "742:5:1",
       "type": ""
    }
  ],
  "src": "696:139:1"
},
{
  "body": {
     "nativeSrc": "886:32:1",
     "nodeType": "YulBlock",
     "src": "886:32:1",
     "statements": [
       {
          "nativeSrc": "896:16:1",
          "nodeType": "YulAssignment",
          "src": "896:16:1",
          "value": {
             "name": "value",
             "nativeSrc": "907:5:1",
             "nodeType": "Yulldentifier",
             "src": "907:5:1"
          },
          "variableNames": [
            {
```

```
"name": "cleaned",
            "nativeSrc": "896:7:1",
             "nodeType": "Yulldentifier",
             "src": "896:7:1"
          }
       ]
     }
  ]
},
"name": "cleanup_t_uint256",
"nativeSrc": "841:77:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "868:5:1",
     "nodeType": "YulTypedName",
     "src": "868:5:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "cleaned",
     "nativeSrc": "878:7:1",
     "nodeType": "YulTypedName",
```

```
"src": "878:7:1",
       "type": ""
     }
  ],
  "src": "841:77:1"
},
{
  "body": {
     "nativeSrc": "967:79:1",
     "nodeType": "YulBlock",
     "src": "967:79:1",
     "statements": [
       {
          "body": {
             "nativeSrc": "1024:16:1",
             "nodeType": "YulBlock",
             "src": "1024:16:1",
             "statements": [
               {
                  "expression": {
                     "arguments": [
                       {
                          "kind": "number",
                          "nativeSrc": "1033:1:1",
                          "nodeType": "YulLiteral",
                          "src": "1033:1:1",
```

```
"type": "",
          "value": "0"
       },
        {
          "kind": "number",
          "nativeSrc": "1036:1:1",
          "nodeType": "YulLiteral",
          "src": "1036:1:1",
          "type": "",
          "value": "0"
       }
     ],
     "functionName": {
        "name": "revert",
        "nativeSrc": "1026:6:1",
        "nodeType": "Yulldentifier",
        "src": "1026:6:1"
     },
     "nativeSrc": "1026:12:1",
     "nodeType": "YulFunctionCall",
     "src": "1026:12:1"
  },
  "nativeSrc": "1026:12:1",
  "nodeType": "YulExpressionStatement",
  "src": "1026:12:1"
}
```

```
]
},
"condition": {
  "arguments": [
    {
       "arguments": [
          {
            "name": "value",
             "nativeSrc": "990:5:1",
             "nodeType": "Yulldentifier",
            "src": "990:5:1"
          },
          {
            "arguments": [
               {
                  "name": "value",
                  "nativeSrc": "1015:5:1",
                  "nodeType": "Yulldentifier",
                  "src": "1015:5:1"
               }
            ],
             "functionName": {
               "name": "cleanup_t_uint256",
               "nativeSrc": "997:17:1",
               "nodeType": "Yulldentifier",
               "src": "997:17:1"
```

```
},
          "nativeSrc": "997:24:1",
          "nodeType": "YulFunctionCall",
          "src": "997:24:1"
       }
     ],
     "functionName": {
        "name": "eq",
        "nativeSrc": "987:2:1",
        "nodeType": "Yulldentifier",
        "src": "987:2:1"
     },
     "nativeSrc": "987:35:1",
     "nodeType": "YulFunctionCall",
     "src": "987:35:1"
  }
],
"functionName": {
  "name": "iszero",
  "nativeSrc": "980:6:1",
  "nodeType": "Yulldentifier",
  "src": "980:6:1"
},
"nativeSrc": "980:43:1",
"nodeType": "YulFunctionCall",
"src": "980:43:1"
```

```
},
          "nativeSrc": "977:63:1",
          "nodeType": "Yullf",
          "src": "977:63:1"
       }
     ]
  },
  "name": "validator_revert_t_uint256",
  "nativeSrc": "924:122:1",
  "nodeType": "YulFunctionDefinition",
  "parameters": [
     {
       "name": "value",
       "nativeSrc": "960:5:1",
       "nodeType": "YulTypedName",
       "src": "960:5:1",
       "type": ""
     }
  ],
  "src": "924:122:1"
},
{
  "body": {
     "nativeSrc": "1104:87:1",
     "nodeType": "YulBlock",
     "src": "1104:87:1",
```

```
"statements": [
  {
     "nativeSrc": "1114:29:1",
     "nodeType": "YulAssignment",
     "src": "1114:29:1",
     "value": {
       "arguments": [
         {
            "name": "offset",
            "nativeSrc": "1136:6:1",
            "nodeType": "Yulldentifier",
            "src": "1136:6:1"
         }
       ],
       "functionName": {
          "name": "calldataload",
          "nativeSrc": "1123:12:1",
          "nodeType": "Yulldentifier",
          "src": "1123:12:1"
       },
       "nativeSrc": "1123:20:1",
       "nodeType": "YulFunctionCall",
       "src": "1123:20:1"
     },
     "variableNames": [
       {
```

```
"name": "value",
       "nativeSrc": "1114:5:1",
        "nodeType": "Yulldentifier",
       "src": "1114:5:1"
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value",
          "nativeSrc": "1179:5:1",
          "nodeType": "Yulldentifier",
          "src": "1179:5:1"
       }
     ],
     "functionName": {
       "name": "validator_revert_t_uint256",
       "nativeSrc": "1152:26:1",
       "nodeType": "Yulldentifier",
       "src": "1152:26:1"
     },
     "nativeSrc": "1152:33:1",
     "nodeType": "YulFunctionCall",
     "src": "1152:33:1"
```

```
},
       "nativeSrc": "1152:33:1",
       "nodeType": "YulExpressionStatement",
       "src": "1152:33:1"
     }
  ]
},
"name": "abi_decode_t_uint256",
"nativeSrc": "1052:139:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "offset",
     "nativeSrc": "1082:6:1",
     "nodeType": "YulTypedName",
     "src": "1082:6:1",
     "type": ""
  },
  {
     "name": "end",
     "nativeSrc": "1090:3:1",
     "nodeType": "YulTypedName",
     "src": "1090:3:1",
     "type": ""
  }
],
```

```
"returnVariables": [
     {
       "name": "value",
       "nativeSrc": "1098:5:1",
       "nodeType": "YulTypedName",
       "src": "1098:5:1",
       "type": ""
    }
  ],
  "src": "1052:139:1"
},
{
  "body": {
     "nativeSrc": "1280:391:1",
     "nodeType": "YulBlock",
     "src": "1280:391:1",
     "statements": [
       {
          "body": {
             "nativeSrc": "1326:83:1",
             "nodeType": "YulBlock",
             "src": "1326:83:1",
             "statements": [
               {
                  "expression": {
                    "arguments": [],
```

```
"functionName": {
```

"name":

```
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",
                                                    "nativeSrc": "1328:77:1",
                                                    "nodeType": "Yulldentifier",
                                                    "src": "1328:77:1"
                                                 },
                                                 "nativeSrc": "1328:79:1",
                                                 "nodeType": "YulFunctionCall",
                                                 "src": "1328:79:1"
                                               },
                                               "nativeSrc": "1328:79:1",
                                               "nodeType": "YulExpressionStatement",
                                               "src": "1328:79:1"
                                            }
                                          ]
                                       },
                                       "condition": {
                                          "arguments": [
                                            {
                                               "arguments": [
                                                 {
                                                    "name": "dataEnd",
                                                    "nativeSrc": "1301:7:1",
                                                    "nodeType": "Yulldentifier",
```

"src": "1301:7:1"

```
},
     {
        "name": "headStart",
        "nativeSrc": "1310:9:1",
        "nodeType": "Yulldentifier",
        "src": "1310:9:1"
     }
  ],
  "functionName": {
     "name": "sub",
     "nativeSrc": "1297:3:1",
     "nodeType": "Yulldentifier",
     "src": "1297:3:1"
  },
  "nativeSrc": "1297:23:1",
  "nodeType": "YulFunctionCall",
  "src": "1297:23:1"
},
{
  "kind": "number",
  "nativeSrc": "1322:2:1",
  "nodeType": "YulLiteral",
  "src": "1322:2:1",
  "type": "",
  "value": "64"
}
```

```
],
     "functionName": {
       "name": "slt",
       "nativeSrc": "1293:3:1",
       "nodeType": "Yulldentifier",
       "src": "1293:3:1"
     },
     "nativeSrc": "1293:32:1",
     "nodeType": "YulFunctionCall",
     "src": "1293:32:1"
  },
  "nativeSrc": "1290:119:1",
  "nodeType": "Yullf",
  "src": "1290:119:1"
},
{
  "nativeSrc": "1419:117:1",
  "nodeType": "YulBlock",
  "src": "1419:117:1",
  "statements": [
     {
       "nativeSrc": "1434:15:1",
        "nodeType": "YulVariableDeclaration",
       "src": "1434:15:1",
        "value": {
          "kind": "number",
```

```
"nativeSrc": "1448:1:1",
     "nodeType": "YulLiteral",
     "src": "1448:1:1",
     "type": "",
     "value": "0"
  },
  "variables": [
     {
        "name": "offset",
        "nativeSrc": "1438:6:1",
        "nodeType": "YulTypedName",
        "src": "1438:6:1",
        "type": ""
     }
  ]
},
{
  "nativeSrc": "1463:63:1",
  "nodeType": "YulAssignment",
  "src": "1463:63:1",
  "value": {
     "arguments": [
       {
          "arguments": [
            {
               "name": "headStart",
```

```
"nativeSrc": "1498:9:1",
       "nodeType": "Yulldentifier",
       "src": "1498:9:1"
     },
     {
       "name": "offset",
       "nativeSrc": "1509:6:1",
       "nodeType": "Yulldentifier",
        "src": "1509:6:1"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "1494:3:1",
     "nodeType": "Yulldentifier",
     "src": "1494:3:1"
  },
  "nativeSrc": "1494:22:1",
  "nodeType": "YulFunctionCall",
  "src": "1494:22:1"
},
{
  "name": "dataEnd",
  "nativeSrc": "1518:7:1",
  "nodeType": "Yulldentifier",
  "src": "1518:7:1"
```

```
],
          "functionName": {
            "name": "abi_decode_t_address",
            "nativeSrc": "1473:20:1",
            "nodeType": "Yulldentifier",
            "src": "1473:20:1"
          },
          "nativeSrc": "1473:53:1",
          "nodeType": "YulFunctionCall",
          "src": "1473:53:1"
       },
       "variableNames": [
          {
            "name": "value0",
            "nativeSrc": "1463:6:1",
            "nodeType": "Yulldentifier",
            "src": "1463:6:1"
          }
       ]
     }
  ]
},
{
  "nativeSrc": "1546:118:1",
  "nodeType": "YulBlock",
```

}

```
"src": "1546:118:1",
"statements": [
  {
     "nativeSrc": "1561:16:1",
     "nodeType": "YulVariableDeclaration",
     "src": "1561:16:1",
     "value": {
       "kind": "number",
       "nativeSrc": "1575:2:1",
       "nodeType": "YulLiteral",
       "src": "1575:2:1",
       "type": "",
       "value": "32"
     },
     "variables": [
       {
          "name": "offset",
          "nativeSrc": "1565:6:1",
          "nodeType": "YulTypedName",
          "src": "1565:6:1",
          "type": ""
       }
     ]
  },
  {
     "nativeSrc": "1591:63:1",
```

```
"nodeType": "YulAssignment",
"src": "1591:63:1",
"value": {
  "arguments": [
    {
       "arguments": [
          {
            "name": "headStart",
            "nativeSrc": "1626:9:1",
            "nodeType": "Yulldentifier",
            "src": "1626:9:1"
          },
          {
             "name": "offset",
            "nativeSrc": "1637:6:1",
            "nodeType": "Yulldentifier",
            "src": "1637:6:1"
          }
       ],
       "functionName": {
          "name": "add",
          "nativeSrc": "1622:3:1",
          "nodeType": "Yulldentifier",
          "src": "1622:3:1"
       },
       "nativeSrc": "1622:22:1",
```

```
"nodeType": "YulFunctionCall",
        "src": "1622:22:1"
     },
     {
        "name": "dataEnd",
        "nativeSrc": "1646:7:1",
        "nodeType": "Yulldentifier",
        "src": "1646:7:1"
     }
  ],
  "functionName": {
     "name": "abi_decode_t_uint256",
     "nativeSrc": "1601:20:1",
     "nodeType": "Yulldentifier",
     "src": "1601:20:1"
  },
  "nativeSrc": "1601:53:1",
  "nodeType": "YulFunctionCall",
  "src": "1601:53:1"
},
"variableNames": [
  {
     "name": "value1",
     "nativeSrc": "1591:6:1",
     "nodeType": "Yulldentifier",
     "src": "1591:6:1"
```

```
}
            ]
          }
       ]
     }
  ]
},
"name": "abi_decode_tuple_t_addresst_uint256",
"nativeSrc": "1197:474:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "headStart",
     "nativeSrc": "1242:9:1",
     "nodeType": "YulTypedName",
     "src": "1242:9:1",
     "type": ""
  },
  {
     "name": "dataEnd",
     "nativeSrc": "1253:7:1",
     "nodeType": "YulTypedName",
     "src": "1253:7:1",
     "type": ""
  }
],
```

```
"returnVariables": [
    {
       "name": "value0",
       "nativeSrc": "1265:6:1",
       "nodeType": "YulTypedName",
       "src": "1265:6:1",
       "type": ""
    },
     {
       "name": "value1",
       "nativeSrc": "1273:6:1",
       "nodeType": "YulTypedName",
       "src": "1273:6:1",
       "type": ""
    }
  ],
  "src": "1197:474:1"
},
{
  "body": {
     "nativeSrc": "1743:263:1",
     "nodeType": "YulBlock",
     "src": "1743:263:1",
     "statements": [
       {
          "body": {
```

```
"nativeSrc": "1789:83:1",
                                          "nodeType": "YulBlock",
                                          "src": "1789:83:1",
                                          "statements": [
                                            {
                                               "expression": {
                                                  "arguments": [],
                                                  "functionName": {
                                                                                            "name":
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",
                                                    "nativeSrc": "1791:77:1",
                                                    "nodeType": "Yulldentifier",
                                                    "src": "1791:77:1"
                                                 },
                                                  "nativeSrc": "1791:79:1",
                                                  "nodeType": "YulFunctionCall",
                                                  "src": "1791:79:1"
                                               },
                                               "nativeSrc": "1791:79:1",
                                               "nodeType": "YulExpressionStatement",
                                               "src": "1791:79:1"
                                            }
                                          ]
                                        },
                                        "condition": {
                                          "arguments": [
```

```
"arguments": [
     {
        "name": "dataEnd",
        "nativeSrc": "1764:7:1",
        "nodeType": "Yulldentifier",
        "src": "1764:7:1"
     },
     {
        "name": "headStart",
        "nativeSrc": "1773:9:1",
        "nodeType": "Yulldentifier",
        "src": "1773:9:1"
     }
  ],
  "functionName": {
     "name": "sub",
     "nativeSrc": "1760:3:1",
     "nodeType": "Yulldentifier",
     "src": "1760:3:1"
  },
  "nativeSrc": "1760:23:1",
  "nodeType": "YulFunctionCall",
  "src": "1760:23:1"
},
{
```

{

```
"kind": "number",
          "nativeSrc": "1785:2:1",
          "nodeType": "YulLiteral",
          "src": "1785:2:1",
          "type": "",
          "value": "32"
       }
     ],
     "functionName": {
       "name": "slt",
       "nativeSrc": "1756:3:1",
       "nodeType": "Yulldentifier",
       "src": "1756:3:1"
     },
     "nativeSrc": "1756:32:1",
     "nodeType": "YulFunctionCall",
     "src": "1756:32:1"
  },
  "nativeSrc": "1753:119:1",
  "nodeType": "Yullf",
  "src": "1753:119:1"
},
{
  "nativeSrc": "1882:117:1",
  "nodeType": "YulBlock",
  "src": "1882:117:1",
```

```
"statements": [
  {
     "nativeSrc": "1897:15:1",
     "nodeType": "YulVariableDeclaration",
     "src": "1897:15:1",
     "value": {
       "kind": "number",
       "nativeSrc": "1911:1:1",
       "nodeType": "YulLiteral",
       "src": "1911:1:1",
       "type": "",
       "value": "0"
    },
     "variables": [
       {
          "name": "offset",
          "nativeSrc": "1901:6:1",
          "nodeType": "YulTypedName",
          "src": "1901:6:1",
          "type": ""
       }
    ]
  },
  {
     "nativeSrc": "1926:63:1",
     "nodeType": "YulAssignment",
```

```
"src": "1926:63:1",
"value": {
  "arguments": [
    {
       "arguments": [
          {
            "name": "headStart",
            "nativeSrc": "1961:9:1",
            "nodeType": "Yulldentifier",
            "src": "1961:9:1"
          },
          {
            "name": "offset",
             "nativeSrc": "1972:6:1",
            "nodeType": "Yulldentifier",
             "src": "1972:6:1"
          }
       ],
       "functionName": {
          "name": "add",
          "nativeSrc": "1957:3:1",
          "nodeType": "Yulldentifier",
          "src": "1957:3:1"
       },
       "nativeSrc": "1957:22:1",
       "nodeType": "YulFunctionCall",
```

```
"src": "1957:22:1"
     },
     {
        "name": "dataEnd",
        "nativeSrc": "1981:7:1",
        "nodeType": "Yulldentifier",
        "src": "1981:7:1"
     }
  ],
  "functionName": {
     "name": "abi_decode_t_uint256",
     "nativeSrc": "1936:20:1",
     "nodeType": "Yulldentifier",
     "src": "1936:20:1"
  },
  "nativeSrc": "1936:53:1",
  "nodeType": "YulFunctionCall",
  "src": "1936:53:1"
},
"variableNames": [
  {
     "name": "value0",
     "nativeSrc": "1926:6:1",
     "nodeType": "Yulldentifier",
     "src": "1926:6:1"
  }
```

```
]
          }
       ]
     }
  ]
},
"name": "abi_decode_tuple_t_uint256",
"nativeSrc": "1677:329:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "headStart",
     "nativeSrc": "1713:9:1",
     "nodeType": "YulTypedName",
     "src": "1713:9:1",
     "type": ""
  },
  {
     "name": "dataEnd",
     "nativeSrc": "1724:7:1",
     "nodeType": "YulTypedName",
     "src": "1724:7:1",
     "type": ""
  }
],
"returnVariables": [
```

```
{
       "name": "value0",
       "nativeSrc": "1736:6:1",
       "nodeType": "YulTypedName",
       "src": "1736:6:1",
       "type": ""
    }
  ],
  "src": "1677:329:1"
},
{
  "body": {
     "nativeSrc": "2077:53:1",
     "nodeType": "YulBlock",
     "src": "2077:53:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "name": "pos",
                  "nativeSrc": "2094:3:1",
                  "nodeType": "Yulldentifier",
                  "src": "2094:3:1"
               },
               {
```

```
"arguments": [
       {
          "name": "value",
          "nativeSrc": "2117:5:1",
          "nodeType": "Yulldentifier",
          "src": "2117:5:1"
       }
     ],
     "functionName": {
       "name": "cleanup_t_address",
       "nativeSrc": "2099:17:1",
       "nodeType": "Yulldentifier",
       "src": "2099:17:1"
     },
     "nativeSrc": "2099:24:1",
     "nodeType": "YulFunctionCall",
     "src": "2099:24:1"
  }
],
"functionName": {
  "name": "mstore",
  "nativeSrc": "2087:6:1",
  "nodeType": "Yulldentifier",
  "src": "2087:6:1"
},
"nativeSrc": "2087:37:1",
```

```
"nodeType": "YulFunctionCall",
          "src": "2087:37:1"
       },
       "nativeSrc": "2087:37:1",
       "nodeType": "YulExpressionStatement",
       "src": "2087:37:1"
     }
  ]
},
"name": "abi_encode_t_address_to_t_address_fromStack",
"nativeSrc": "2012:118:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "2065:5:1",
     "nodeType": "YulTypedName",
     "src": "2065:5:1",
     "type": ""
  },
  {
     "name": "pos",
     "nativeSrc": "2072:3:1",
     "nodeType": "YulTypedName",
     "src": "2072:3:1",
     "type": ""
```

```
}
  ],
  "src": "2012:118:1"
},
{
  "body": {
     "nativeSrc": "2201:53:1",
     "nodeType": "YulBlock",
     "src": "2201:53:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "name": "pos",
                  "nativeSrc": "2218:3:1",
                  "nodeType": "Yulldentifier",
                  "src": "2218:3:1"
               },
               {
                  "arguments": [
                    {
                       "name": "value",
                       "nativeSrc": "2241:5:1",
                       "nodeType": "Yulldentifier",
                       "src": "2241:5:1"
```

```
],
       "functionName": {
          "name": "cleanup_t_uint256",
          "nativeSrc": "2223:17:1",
          "nodeType": "Yulldentifier",
          "src": "2223:17:1"
       },
       "nativeSrc": "2223:24:1",
       "nodeType": "YulFunctionCall",
       "src": "2223:24:1"
    }
  ],
  "functionName": {
     "name": "mstore",
     "nativeSrc": "2211:6:1",
     "nodeType": "Yulldentifier",
     "src": "2211:6:1"
  },
  "nativeSrc": "2211:37:1",
  "nodeType": "YulFunctionCall",
  "src": "2211:37:1"
},
"nativeSrc": "2211:37:1",
"nodeType": "YulExpressionStatement",
"src": "2211:37:1"
```

}

```
}
    ]
  },
  "name": "abi_encode_t_uint256_to_t_uint256_fromStack",
  "nativeSrc": "2136:118:1",
  "nodeType": "YulFunctionDefinition",
  "parameters": [
    {
       "name": "value",
       "nativeSrc": "2189:5:1",
       "nodeType": "YulTypedName",
       "src": "2189:5:1",
       "type": ""
    },
    {
       "name": "pos",
       "nativeSrc": "2196:3:1",
       "nodeType": "YulTypedName",
       "src": "2196:3:1",
       "type": ""
    }
  ],
  "src": "2136:118:1"
},
{
  "body": {
```

```
"nativeSrc": "2414:288:1",
"nodeType": "YulBlock",
"src": "2414:288:1",
"statements": [
  {
     "nativeSrc": "2424:26:1",
     "nodeType": "YulAssignment",
     "src": "2424:26:1",
     "value": {
       "arguments": [
         {
            "name": "headStart",
            "nativeSrc": "2436:9:1",
            "nodeType": "Yulldentifier",
            "src": "2436:9:1"
         },
          {
            "kind": "number",
            "nativeSrc": "2447:2:1",
            "nodeType": "YulLiteral",
            "src": "2447:2:1",
            "type": "",
            "value": "96"
         }
       ],
       "functionName": {
```

```
"name": "add",
       "nativeSrc": "2432:3:1",
        "nodeType": "Yulldentifier",
       "src": "2432:3:1"
     },
     "nativeSrc": "2432:18:1",
     "nodeType": "YulFunctionCall",
     "src": "2432:18:1"
  },
  "variableNames": [
    {
       "name": "tail",
       "nativeSrc": "2424:4:1",
       "nodeType": "Yulldentifier",
       "src": "2424:4:1"
    }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "2504:6:1",
          "nodeType": "Yulldentifier",
          "src": "2504:6:1"
```

```
},
  "arguments": [
     {
        "name": "headStart",
        "nativeSrc": "2517:9:1",
        "nodeType": "Yulldentifier",
        "src": "2517:9:1"
     },
     {
        "kind": "number",
        "nativeSrc": "2528:1:1",
        "nodeType": "YulLiteral",
        "src": "2528:1:1",
        "type": "",
        "value": "0"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "2513:3:1",
     "nodeType": "Yulldentifier",
     "src": "2513:3:1"
  },
  "nativeSrc": "2513:17:1",
  "nodeType": "YulFunctionCall",
```

{

```
"src": "2513:17:1"
                                             }
                                           ],
                                           "functionName": {
"abi_encode_t_address_to_t_address_fromStack",
                                             "nativeSrc": "2460:43:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "2460:43:1"
                                           },
                                           "nativeSrc": "2460:71:1",
                                           "nodeType": "YulFunctionCall",
                                           "src": "2460:71:1"
                                        },
                                        "nativeSrc": "2460:71:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "2460:71:1"
                                      },
                                      {
                                        "expression": {
                                           "arguments": [
                                             {
                                                "name": "value1",
                                                "nativeSrc": "2585:6:1",
                                                "nodeType": "Yulldentifier",
                                                "src": "2585:6:1"
```

"name":

```
},
{
  "arguments": [
     {
        "name": "headStart",
        "nativeSrc": "2598:9:1",
        "nodeType": "Yulldentifier",
        "src": "2598:9:1"
     },
     {
        "kind": "number",
        "nativeSrc": "2609:2:1",
        "nodeType": "YulLiteral",
        "src": "2609:2:1",
        "type": "",
        "value": "32"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "2594:3:1",
     "nodeType": "Yulldentifier",
     "src": "2594:3:1"
  },
  "nativeSrc": "2594:18:1",
  "nodeType": "YulFunctionCall",
```

```
"src": "2594:18:1"
                                             }
                                           ],
                                           "functionName": {
"abi_encode_t_uint256_to_t_uint256_fromStack",
                                              "nativeSrc": "2541:43:1",
                                              "nodeType": "Yulldentifier",
                                              "src": "2541:43:1"
                                           },
                                           "nativeSrc": "2541:72:1",
                                           "nodeType": "YulFunctionCall",
                                           "src": "2541:72:1"
                                        },
                                        "nativeSrc": "2541:72:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "2541:72:1"
                                      },
                                      {
                                        "expression": {
                                           "arguments": [
                                             {
                                                "name": "value2",
                                                "nativeSrc": "2667:6:1",
                                                "nodeType": "Yulldentifier",
                                                "src": "2667:6:1"
```

"name":

```
},
{
  "arguments": [
     {
        "name": "headStart",
        "nativeSrc": "2680:9:1",
        "nodeType": "Yulldentifier",
        "src": "2680:9:1"
     },
     {
        "kind": "number",
        "nativeSrc": "2691:2:1",
        "nodeType": "YulLiteral",
        "src": "2691:2:1",
        "type": "",
        "value": "64"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "2676:3:1",
     "nodeType": "Yulldentifier",
     "src": "2676:3:1"
  },
  "nativeSrc": "2676:18:1",
  "nodeType": "YulFunctionCall",
```

```
"src": "2676:18:1"
                                            }
                                          ],
                                          "functionName": {
                                                                                            "name":
"abi_encode_t_uint256_to_t_uint256_fromStack",
                                             "nativeSrc": "2623:43:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "2623:43:1"
                                          },
                                          "nativeSrc": "2623:72:1",
                                          "nodeType": "YulFunctionCall",
                                          "src": "2623:72:1"
                                        },
                                        "nativeSrc": "2623:72:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "2623:72:1"
                                     }
                                  ]
                                },
                                                                                            "name":
"abi_encode_tuple_t_address_t_uint256_t_uint256__to_t_address_t_uint256_t_uint256__fromStack
_reversed",
                                "nativeSrc": "2260:442:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
```

```
{
  "name": "headStart",
  "nativeSrc": "2370:9:1",
  "nodeType": "YulTypedName",
  "src": "2370:9:1",
  "type": ""
},
{
  "name": "value2",
  "nativeSrc": "2382:6:1",
  "nodeType": "YulTypedName",
  "src": "2382:6:1",
  "type": ""
},
{
  "name": "value1",
  "nativeSrc": "2390:6:1",
  "nodeType": "YulTypedName",
  "src": "2390:6:1",
  "type": ""
},
{
  "name": "value0",
  "nativeSrc": "2398:6:1",
  "nodeType": "YulTypedName",
  "src": "2398:6:1",
```

```
"type": ""
    }
  ],
  "returnVariables": [
    {
       "name": "tail",
       "nativeSrc": "2409:4:1",
       "nodeType": "YulTypedName",
       "src": "2409:4:1",
       "type": ""
     }
  ],
  "src": "2260:442:1"
},
{
  "body": {
     "nativeSrc": "2774:263:1",
     "nodeType": "YulBlock",
     "src": "2774:263:1",
     "statements": [
       {
          "body": {
             "nativeSrc": "2820:83:1",
             "nodeType": "YulBlock",
             "src": "2820:83:1",
             "statements": [
```

```
{
                                               "expression": {
                                                 "arguments": [],
                                                 "functionName": {
                                                                                           "name":
"revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b",
                                                    "nativeSrc": "2822:77:1",
                                                    "nodeType": "Yulldentifier",
                                                    "src": "2822:77:1"
                                                 },
                                                 "nativeSrc": "2822:79:1",
                                                 "nodeType": "YulFunctionCall",
                                                 "src": "2822:79:1"
                                               },
                                               "nativeSrc": "2822:79:1",
                                               "nodeType": "YulExpressionStatement",
                                               "src": "2822:79:1"
                                            }
                                         ]
                                       },
                                       "condition": {
                                          "arguments": [
                                            {
                                               "arguments": [
                                                 {
                                                    "name": "dataEnd",
```

```
"nativeSrc": "2795:7:1",
        "nodeType": "Yulldentifier",
        "src": "2795:7:1"
     },
     {
        "name": "headStart",
        "nativeSrc": "2804:9:1",
        "nodeType": "Yulldentifier",
        "src": "2804:9:1"
     }
  ],
  "functionName": {
     "name": "sub",
     "nativeSrc": "2791:3:1",
     "nodeType": "Yulldentifier",
     "src": "2791:3:1"
  },
  "nativeSrc": "2791:23:1",
  "nodeType": "YulFunctionCall",
  "src": "2791:23:1"
},
{
  "kind": "number",
  "nativeSrc": "2816:2:1",
  "nodeType": "YulLiteral",
   "src": "2816:2:1",
```

```
"type": "",
          "value": "32"
       }
     ],
     "functionName": {
       "name": "slt",
       "nativeSrc": "2787:3:1",
       "nodeType": "Yulldentifier",
       "src": "2787:3:1"
     },
     "nativeSrc": "2787:32:1",
     "nodeType": "YulFunctionCall",
     "src": "2787:32:1"
  },
  "nativeSrc": "2784:119:1",
  "nodeType": "Yullf",
  "src": "2784:119:1"
},
{
  "nativeSrc": "2913:117:1",
  "nodeType": "YulBlock",
  "src": "2913:117:1",
  "statements": [
     {
       "nativeSrc": "2928:15:1",
       "nodeType": "YulVariableDeclaration",
```

```
"src": "2928:15:1",
  "value": {
     "kind": "number",
     "nativeSrc": "2942:1:1",
     "nodeType": "YulLiteral",
     "src": "2942:1:1",
     "type": "",
     "value": "0"
  },
  "variables": [
     {
        "name": "offset",
        "nativeSrc": "2932:6:1",
        "nodeType": "YulTypedName",
        "src": "2932:6:1",
        "type": ""
     }
  ]
},
{
  "nativeSrc": "2957:63:1",
  "nodeType": "YulAssignment",
  "src": "2957:63:1",
  "value": {
     "arguments": [
       {
```

```
"arguments": [
     {
       "name": "headStart",
       "nativeSrc": "2992:9:1",
       "nodeType": "Yulldentifier",
       "src": "2992:9:1"
     },
     {
       "name": "offset",
       "nativeSrc": "3003:6:1",
       "nodeType": "Yulldentifier",
       "src": "3003:6:1"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "2988:3:1",
     "nodeType": "Yulldentifier",
     "src": "2988:3:1"
  },
  "nativeSrc": "2988:22:1",
  "nodeType": "YulFunctionCall",
  "src": "2988:22:1"
},
{
  "name": "dataEnd",
```

```
"nativeSrc": "3012:7:1",
             "nodeType": "Yulldentifier",
             "src": "3012:7:1"
          }
       ],
       "functionName": {
          "name": "abi_decode_t_address",
          "nativeSrc": "2967:20:1",
          "nodeType": "Yulldentifier",
          "src": "2967:20:1"
       },
       "nativeSrc": "2967:53:1",
       "nodeType": "YulFunctionCall",
       "src": "2967:53:1"
    },
     "variableNames": [
       {
          "name": "value0",
          "nativeSrc": "2957:6:1",
          "nodeType": "Yulldentifier",
          "src": "2957:6:1"
       }
     ]
  }
]
```

```
]
},
"name": "abi_decode_tuple_t_address",
"nativeSrc": "2708:329:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "headStart",
     "nativeSrc": "2744:9:1",
     "nodeType": "YulTypedName",
     "src": "2744:9:1",
     "type": ""
  },
  {
     "name": "dataEnd",
     "nativeSrc": "2755:7:1",
     "nodeType": "YulTypedName",
     "src": "2755:7:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "value0",
     "nativeSrc": "2767:6:1",
     "nodeType": "YulTypedName",
```

```
"src": "2767:6:1",
       "type": ""
    }
  ],
  "src": "2708:329:1"
},
{
  "body": {
     "nativeSrc": "3169:206:1",
     "nodeType": "YulBlock",
     "src": "3169:206:1",
     "statements": [
       {
          "nativeSrc": "3179:26:1",
          "nodeType": "YulAssignment",
          "src": "3179:26:1",
          "value": {
             "arguments": [
               {
                  "name": "headStart",
                  "nativeSrc": "3191:9:1",
                  "nodeType": "Yulldentifier",
                  "src": "3191:9:1"
               },
               {
                  "kind": "number",
```

```
"nativeSrc": "3202:2:1",
          "nodeType": "YulLiteral",
          "src": "3202:2:1",
          "type": "",
          "value": "64"
       }
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "3187:3:1",
       "nodeType": "Yulldentifier",
       "src": "3187:3:1"
     },
     "nativeSrc": "3187:18:1",
     "nodeType": "YulFunctionCall",
     "src": "3187:18:1"
  },
  "variableNames": [
     {
       "name": "tail",
       "nativeSrc": "3179:4:1",
       "nodeType": "Yulldentifier",
       "src": "3179:4:1"
     }
  ]
},
```

```
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "3259:6:1",
          "nodeType": "Yulldentifier",
          "src": "3259:6:1"
       },
       {
          "arguments": [
             {
               "name": "headStart",
               "nativeSrc": "3272:9:1",
               "nodeType": "Yulldentifier",
               "src": "3272:9:1"
            },
             {
               "kind": "number",
               "nativeSrc": "3283:1:1",
               "nodeType": "YulLiteral",
               "src": "3283:1:1",
               "type": "",
               "value": "0"
             }
          ],
```

```
"functionName": {
                                                  "name": "add",
                                                  "nativeSrc": "3268:3:1",
                                                  "nodeType": "Yulldentifier",
                                                  "src": "3268:3:1"
                                                },
                                                "nativeSrc": "3268:17:1",
                                                "nodeType": "YulFunctionCall",
                                                "src": "3268:17:1"
                                             }
                                          ],
                                           "functionName": {
                                                                                             "name":
"abi_encode_t_uint256_to_t_uint256_fromStack",
                                             "nativeSrc": "3215:43:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "3215:43:1"
                                          },
                                           "nativeSrc": "3215:71:1",
                                           "nodeType": "YulFunctionCall",
                                           "src": "3215:71:1"
                                        },
                                        "nativeSrc": "3215:71:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "3215:71:1"
                                     },
```

```
{
  "expression": {
     "arguments": [
       {
          "name": "value1",
          "nativeSrc": "3340:6:1",
          "nodeType": "Yulldentifier",
          "src": "3340:6:1"
       },
       {
          "arguments": [
             {
               "name": "headStart",
               "nativeSrc": "3353:9:1",
               "nodeType": "Yulldentifier",
               "src": "3353:9:1"
            },
             {
               "kind": "number",
               "nativeSrc": "3364:2:1",
               "nodeType": "YulLiteral",
               "src": "3364:2:1",
               "type": "",
               "value": "32"
             }
          ],
```

```
"functionName": {
                                                  "name": "add",
                                                  "nativeSrc": "3349:3:1",
                                                  "nodeType": "Yulldentifier",
                                                  "src": "3349:3:1"
                                                },
                                                "nativeSrc": "3349:18:1",
                                                "nodeType": "YulFunctionCall",
                                                "src": "3349:18:1"
                                             }
                                          ],
                                           "functionName": {
                                                                                             "name":
"abi_encode_t_uint256_to_t_uint256_fromStack",
                                             "nativeSrc": "3296:43:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "3296:43:1"
                                          },
                                           "nativeSrc": "3296:72:1",
                                           "nodeType": "YulFunctionCall",
                                           "src": "3296:72:1"
                                        },
                                        "nativeSrc": "3296:72:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "3296:72:1"
                                     }
```

```
]
```

"name":

```
"abi_encode_tuple_t_uint256_t_uint256__to_t_uint256_t_uint256__fromStack_reversed",
                                "nativeSrc": "3043:332:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
                                  {
                                    "name": "headStart",
                                     "nativeSrc": "3133:9:1",
                                    "nodeType": "YulTypedName",
                                     "src": "3133:9:1",
                                    "type": ""
                                  },
                                  {
                                    "name": "value1",
                                    "nativeSrc": "3145:6:1",
                                    "nodeType": "YulTypedName",
                                    "src": "3145:6:1",
                                    "type": ""
                                  },
                                  {
                                    "name": "value0",
                                     "nativeSrc": "3153:6:1",
                                    "nodeType": "YulTypedName",
                                     "src": "3153:6:1",
```

```
"type": ""
    }
  ],
  "returnVariables": [
    {
       "name": "tail",
       "nativeSrc": "3164:4:1",
       "nodeType": "YulTypedName",
       "src": "3164:4:1",
       "type": ""
    }
  ],
  "src": "3043:332:1"
},
{
  "body": {
     "nativeSrc": "3479:124:1",
     "nodeType": "YulBlock",
     "src": "3479:124:1",
     "statements": [
       {
          "nativeSrc": "3489:26:1",
          "nodeType": "YulAssignment",
          "src": "3489:26:1",
          "value": {
             "arguments": [
```

```
{
       "name": "headStart",
       "nativeSrc": "3501:9:1",
       "nodeType": "Yulldentifier",
       "src": "3501:9:1"
    },
    {
       "kind": "number",
       "nativeSrc": "3512:2:1",
       "nodeType": "YulLiteral",
       "src": "3512:2:1",
       "type": "",
       "value": "32"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "3497:3:1",
     "nodeType": "Yulldentifier",
     "src": "3497:3:1"
  },
  "nativeSrc": "3497:18:1",
  "nodeType": "YulFunctionCall",
  "src": "3497:18:1"
},
"variableNames": [
```

```
{
       "name": "tail",
        "nativeSrc": "3489:4:1",
        "nodeType": "Yulldentifier",
       "src": "3489:4:1"
    }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "3569:6:1",
          "nodeType": "Yulldentifier",
          "src": "3569:6:1"
       },
       {
          "arguments": [
             {
               "name": "headStart",
               "nativeSrc": "3582:9:1",
               "nodeType": "Yulldentifier",
               "src": "3582:9:1"
            },
             {
```

```
"nativeSrc": "3593:1:1",
                                                      "nodeType": "YulLiteral",
                                                      "src": "3593:1:1",
                                                      "type": "",
                                                      "value": "0"
                                                   }
                                                 ],
                                                 "functionName": {
                                                   "name": "add",
                                                   "nativeSrc": "3578:3:1",
                                                   "nodeType": "Yulldentifier",
                                                   "src": "3578:3:1"
                                                 },
                                                 "nativeSrc": "3578:17:1",
                                                 "nodeType": "YulFunctionCall",
                                                 "src": "3578:17:1"
                                              }
                                           ],
                                            "functionName": {
                                                                                               "name":
"abi_encode_t_uint256_to_t_uint256_fromStack",
                                              "nativeSrc": "3525:43:1",
                                              "nodeType": "Yulldentifier",
                                              "src": "3525:43:1"
                                           },
```

"kind": "number",

```
"nativeSrc": "3525:71:1",
                                          "nodeType": "YulFunctionCall",
                                          "src": "3525:71:1"
                                       },
                                       "nativeSrc": "3525:71:1",
                                       "nodeType": "YulExpressionStatement",
                                       "src": "3525:71:1"
                                     }
                                  1
                                },
                                                                                           "name":
"abi_encode_tuple_t_uint256__to_t_uint256__fromStack_reversed",
                                "nativeSrc": "3381:222:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
                                  {
                                     "name": "headStart",
                                     "nativeSrc": "3451:9:1",
                                     "nodeType": "YulTypedName",
                                     "src": "3451:9:1",
                                     "type": ""
                                  },
                                  {
                                     "name": "value0",
                                     "nativeSrc": "3463:6:1",
                                     "nodeType": "YulTypedName",
```

```
"src": "3463:6:1",
       "type": ""
    }
  ],
  "returnVariables": [
     {
       "name": "tail",
       "nativeSrc": "3474:4:1",
       "nodeType": "YulTypedName",
       "src": "3474:4:1",
       "type": ""
    }
  ],
  "src": "3381:222:1"
},
{
  "body": {
     "nativeSrc": "3664:53:1",
     "nodeType": "YulBlock",
     "src": "3664:53:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "name": "pos",
```

```
"nativeSrc": "3681:3:1",
     "nodeType": "Yulldentifier",
     "src": "3681:3:1"
  },
  {
     "arguments": [
       {
          "name": "value",
          "nativeSrc": "3704:5:1",
          "nodeType": "Yulldentifier",
          "src": "3704:5:1"
       }
     ],
     "functionName": {
       "name": "cleanup_t_uint256",
       "nativeSrc": "3686:17:1",
       "nodeType": "Yulldentifier",
       "src": "3686:17:1"
     },
     "nativeSrc": "3686:24:1",
     "nodeType": "YulFunctionCall",
     "src": "3686:24:1"
  }
],
"functionName": {
  "name": "mstore",
```

```
"nativeSrc": "3674:6:1",
            "nodeType": "Yulldentifier",
            "src": "3674:6:1"
          },
          "nativeSrc": "3674:37:1",
          "nodeType": "YulFunctionCall",
          "src": "3674:37:1"
       },
       "nativeSrc": "3674:37:1",
       "nodeType": "YulExpressionStatement",
       "src": "3674:37:1"
     }
  ]
},
"name": "abi_encode_t_uint256_to_t_uint256",
"nativeSrc": "3609:108:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "value",
     "nativeSrc": "3652:5:1",
     "nodeType": "YulTypedName",
     "src": "3652:5:1",
     "type": ""
  },
  {
```

```
"name": "pos",
       "nativeSrc": "3659:3:1",
       "nodeType": "YulTypedName",
       "src": "3659:3:1",
       "type": ""
     }
  ],
  "src": "3609:108:1"
},
{
  "body": {
     "nativeSrc": "3915:411:1",
     "nodeType": "YulBlock",
     "src": "3915:411:1",
     "statements": [
       {
          "nativeSrc": "3925:26:1",
          "nodeType": "YulVariableDeclaration",
          "src": "3925:26:1",
          "value": {
             "arguments": [
               {
                  "name": "pos",
                  "nativeSrc": "3941:3:1",
                  "nodeType": "Yulldentifier",
                  "src": "3941:3:1"
```

```
},
    {
       "kind": "number",
       "nativeSrc": "3946:4:1",
       "nodeType": "YulLiteral",
       "src": "3946:4:1",
       "type": "",
       "value": "0x40"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "3937:3:1",
     "nodeType": "Yulldentifier",
     "src": "3937:3:1"
  },
  "nativeSrc": "3937:14:1",
  "nodeType": "YulFunctionCall",
  "src": "3937:14:1"
},
"variables": [
  {
     "name": "tail",
     "nativeSrc": "3929:4:1",
     "nodeType": "YulTypedName",
     "src": "3929:4:1",
```

```
"type": ""
     }
  ]
},
{
  "nativeSrc": "3961:174:1",
  "nodeType": "YulBlock",
  "src": "3961:174:1",
  "statements": [
     {
       "nativeSrc": "4006:43:1",
       "nodeType": "YulVariableDeclaration",
       "src": "4006:43:1",
        "value": {
          "arguments": [
               "arguments": [
                  {
                    "name": "value",
                    "nativeSrc": "4036:5:1",
                    "nodeType": "Yulldentifier",
                    "src": "4036:5:1"
                  },
                  {
                    "kind": "number",
                    "nativeSrc": "4043:4:1",
```

```
"nodeType": "YulLiteral",
          "src": "4043:4:1",
          "type": "",
          "value": "0x00"
       }
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "4032:3:1",
       "nodeType": "Yulldentifier",
       "src": "4032:3:1"
     },
     "nativeSrc": "4032:16:1",
     "nodeType": "YulFunctionCall",
     "src": "4032:16:1"
  }
],
"functionName": {
  "name": "mload",
  "nativeSrc": "4026:5:1",
  "nodeType": "Yulldentifier",
  "src": "4026:5:1"
},
"nativeSrc": "4026:23:1",
"nodeType": "YulFunctionCall",
"src": "4026:23:1"
```

```
},
  "variables": [
     {
       "name": "memberValue0",
       "nativeSrc": "4010:12:1",
       "nodeType": "YulTypedName",
       "src": "4010:12:1",
       "type": ""
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "memberValue0",
          "nativeSrc": "4096:12:1",
          "nodeType": "Yulldentifier",
          "src": "4096:12:1"
       },
       {
          "arguments": [
            {
               "name": "pos",
               "nativeSrc": "4114:3:1",
               "nodeType": "Yulldentifier",
```

```
"src": "4114:3:1"
       },
       {
          "kind": "number",
          "nativeSrc": "4119:4:1",
          "nodeType": "YulLiteral",
          "src": "4119:4:1",
          "type": "",
          "value": "0x00"
       }
    ],
     "functionName": {
       "name": "add",
        "nativeSrc": "4110:3:1",
       "nodeType": "Yulldentifier",
       "src": "4110:3:1"
     },
     "nativeSrc": "4110:14:1",
     "nodeType": "YulFunctionCall",
     "src": "4110:14:1"
  }
],
"functionName": {
  "name": "abi_encode_t_uint256_to_t_uint256",
  "nativeSrc": "4062:33:1",
  "nodeType": "Yulldentifier",
```

```
"src": "4062:33:1"
          },
          "nativeSrc": "4062:63:1",
          "nodeType": "YulFunctionCall",
          "src": "4062:63:1"
       },
       "nativeSrc": "4062:63:1",
       "nodeType": "YulExpressionStatement",
       "src": "4062:63:1"
     }
  ]
},
{
  "nativeSrc": "4145:174:1",
  "nodeType": "YulBlock",
  "src": "4145:174:1",
  "statements": [
     {
       "nativeSrc": "4190:43:1",
       "nodeType": "YulVariableDeclaration",
       "src": "4190:43:1",
       "value": {
          "arguments": [
            {
               "arguments": [
                 {
```

```
"name": "value",
          "nativeSrc": "4220:5:1",
          "nodeType": "Yulldentifier",
          "src": "4220:5:1"
       },
       {
          "kind": "number",
          "nativeSrc": "4227:4:1",
          "nodeType": "YulLiteral",
          "src": "4227:4:1",
          "type": "",
          "value": "0x20"
       }
    ],
     "functionName": {
       "name": "add",
       "nativeSrc": "4216:3:1",
       "nodeType": "Yulldentifier",
       "src": "4216:3:1"
    },
     "nativeSrc": "4216:16:1",
     "nodeType": "YulFunctionCall",
     "src": "4216:16:1"
  }
],
"functionName": {
```

```
"name": "mload",
       "nativeSrc": "4210:5:1",
       "nodeType": "Yulldentifier",
       "src": "4210:5:1"
     },
     "nativeSrc": "4210:23:1",
     "nodeType": "YulFunctionCall",
     "src": "4210:23:1"
  },
  "variables": [
     {
       "name": "memberValue0",
       "nativeSrc": "4194:12:1",
       "nodeType": "YulTypedName",
       "src": "4194:12:1",
       "type": ""
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "memberValue0",
          "nativeSrc": "4280:12:1",
          "nodeType": "Yulldentifier",
```

```
"src": "4280:12:1"
},
{
  "arguments": [
     {
       "name": "pos",
       "nativeSrc": "4298:3:1",
       "nodeType": "Yulldentifier",
        "src": "4298:3:1"
     },
     {
       "kind": "number",
       "nativeSrc": "4303:4:1",
       "nodeType": "YulLiteral",
       "src": "4303:4:1",
       "type": "",
       "value": "0x20"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "4294:3:1",
     "nodeType": "Yulldentifier",
     "src": "4294:3:1"
  },
  "nativeSrc": "4294:14:1",
```

```
"src": "4294:14:1"
                                                   }
                                                 ],
                                                 "functionName": {
                                                   "name": "abi_encode_t_uint256_to_t_uint256",
                                                   "nativeSrc": "4246:33:1",
                                                   "nodeType": "Yulldentifier",
                                                   "src": "4246:33:1"
                                                 },
                                                 "nativeSrc": "4246:63:1",
                                                 "nodeType": "YulFunctionCall",
                                                 "src": "4246:63:1"
                                              },
                                              "nativeSrc": "4246:63:1",
                                              "nodeType": "YulExpressionStatement",
                                              "src": "4246:63:1"
                                           }
                                         ]
                                      }
                                    ]
                                 },
                                                                                               "name":
"abi\_encode\_t\_struct\$\_Ledger\_\$7\_memory\_ptr\_to\_t\_struct\$\_Ledger\_\$7\_memory\_ptr\_fromStack",
                                 "nativeSrc": "3807:519:1",
                                 "nodeType": "YulFunctionDefinition",
```

"nodeType": "YulFunctionCall",

```
"parameters": [
     {
       "name": "value",
       "nativeSrc": "3902:5:1",
       "nodeType": "YulTypedName",
       "src": "3902:5:1",
       "type": ""
    },
     {
       "name": "pos",
       "nativeSrc": "3909:3:1",
       "nodeType": "YulTypedName",
       "src": "3909:3:1",
       "type": ""
    }
  ],
  "src": "3807:519:1"
},
{
  "body": {
     "nativeSrc": "4472:166:1",
     "nodeType": "YulBlock",
     "src": "4472:166:1",
     "statements": [
       {
          "nativeSrc": "4482:26:1",
```

```
"nodeType": "YulAssignment",
"src": "4482:26:1",
"value": {
  "arguments": [
    {
       "name": "headStart",
       "nativeSrc": "4494:9:1",
       "nodeType": "Yulldentifier",
       "src": "4494:9:1"
    },
    {
       "kind": "number",
       "nativeSrc": "4505:2:1",
       "nodeType": "YulLiteral",
       "src": "4505:2:1",
       "type": "",
       "value": "64"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "4490:3:1",
     "nodeType": "Yulldentifier",
     "src": "4490:3:1"
  },
  "nativeSrc": "4490:18:1",
```

```
"nodeType": "YulFunctionCall",
     "src": "4490:18:1"
  },
  "variableNames": [
    {
       "name": "tail",
       "nativeSrc": "4482:4:1",
       "nodeType": "Yulldentifier",
       "src": "4482:4:1"
     }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "name": "value0",
          "nativeSrc": "4604:6:1",
          "nodeType": "Yulldentifier",
          "src": "4604:6:1"
       },
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "4617:9:1",
```

```
"nodeType": "Yulldentifier",
          "src": "4617:9:1"
       },
       {
          "kind": "number",
          "nativeSrc": "4628:1:1",
          "nodeType": "YulLiteral",
          "src": "4628:1:1",
          "type": "",
          "value": "0"
       }
     ],
     "functionName": {
       "name": "add",
       "nativeSrc": "4613:3:1",
       "nodeType": "Yulldentifier",
       "src": "4613:3:1"
    },
     "nativeSrc": "4613:17:1",
     "nodeType": "YulFunctionCall",
     "src": "4613:17:1"
  }
"functionName": {
```

"name":

"abi_encode_t_struct\$_Ledger_\$7_memory_ptr_to_t_struct\$_Ledger_\$7_memory_ptr_fromStack",

],

```
"nodeType": "Yulldentifier",
                                            "src": "4518:85:1"
                                          },
                                          "nativeSrc": "4518:113:1",
                                          "nodeType": "YulFunctionCall",
                                          "src": "4518:113:1"
                                       },
                                       "nativeSrc": "4518:113:1",
                                       "nodeType": "YulExpressionStatement",
                                       "src": "4518:113:1"
                                     }
                                  ]
                                },
                                                                                           "name":
"abi_encode_tuple_t_struct$_Ledger_$7_memory_ptr__to_t_struct$_Ledger_$7_memory_ptr__fro
mStack_reversed",
                                "nativeSrc": "4332:306:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
                                  {
                                     "name": "headStart",
                                     "nativeSrc": "4444:9:1",
                                     "nodeType": "YulTypedName",
                                     "src": "4444:9:1",
                                     "type": ""
```

"nativeSrc": "4518:85:1",

```
},
     {
       "name": "value0",
       "nativeSrc": "4456:6:1",
       "nodeType": "YulTypedName",
       "src": "4456:6:1",
       "type": ""
    }
  ],
  "returnVariables": [
    {
       "name": "tail",
       "nativeSrc": "4467:4:1",
       "nodeType": "YulTypedName",
       "src": "4467:4:1",
       "type": ""
    }
  ],
  "src": "4332:306:1"
},
{
  "body": {
     "nativeSrc": "4740:73:1",
     "nodeType": "YulBlock",
     "src": "4740:73:1",
     "statements": [
```

```
"expression": {
  "arguments": [
     {
        "name": "pos",
        "nativeSrc": "4757:3:1",
        "nodeType": "Yulldentifier",
        "src": "4757:3:1"
     },
     {
        "name": "length",
        "nativeSrc": "4762:6:1",
        "nodeType": "Yulldentifier",
        "src": "4762:6:1"
     }
  ],
  "functionName": {
     "name": "mstore",
     "nativeSrc": "4750:6:1",
     "nodeType": "Yulldentifier",
     "src": "4750:6:1"
  },
  "nativeSrc": "4750:19:1",
  "nodeType": "YulFunctionCall",
  "src": "4750:19:1"
},
```

{

```
"nativeSrc": "4750:19:1",
  "nodeType": "YulExpressionStatement",
  "src": "4750:19:1"
},
{
  "nativeSrc": "4778:29:1",
  "nodeType": "YulAssignment",
  "src": "4778:29:1",
  "value": {
     "arguments": [
       {
          "name": "pos",
          "nativeSrc": "4797:3:1",
          "nodeType": "Yulldentifier",
          "src": "4797:3:1"
       },
       {
          "kind": "number",
          "nativeSrc": "4802:4:1",
          "nodeType": "YulLiteral",
          "src": "4802:4:1",
          "type": "",
          "value": "0x20"
       }
     ],
     "functionName": {
```

```
"name": "add",
                                             "nativeSrc": "4793:3:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "4793:3:1"
                                          },
                                           "nativeSrc": "4793:14:1",
                                           "nodeType": "YulFunctionCall",
                                           "src": "4793:14:1"
                                        },
                                        "variableNames": [
                                          {
                                             "name": "updated_pos",
                                             "nativeSrc": "4778:11:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "4778:11:1"
                                          }
                                        ]
                                     }
                                   ]
                                },
                                                                                             "name":
"array_storeLengthForEncoding_t_string_memory_ptr_fromStack",
                                 "nativeSrc": "4644:169:1",
                                 "nodeType": "YulFunctionDefinition",
                                 "parameters": [
                                   {
```

```
"name": "pos",
       "nativeSrc": "4712:3:1",
       "nodeType": "YulTypedName",
       "src": "4712:3:1",
       "type": ""
    },
    {
       "name": "length",
       "nativeSrc": "4717:6:1",
       "nodeType": "YulTypedName",
       "src": "4717:6:1",
       "type": ""
    }
  ],
  "returnVariables": [
    {
       "name": "updated_pos",
       "nativeSrc": "4728:11:1",
       "nodeType": "YulTypedName",
       "src": "4728:11:1",
       "type": ""
    }
  ],
  "src": "4644:169:1"
},
```

{

```
"body": {
  "nativeSrc": "4925:73:1",
  "nodeType": "YulBlock",
  "src": "4925:73:1",
  "statements": [
     {
       "expression": {
          "arguments": [
            {
               "arguments": [
                 {
                    "name": "memPtr",
                    "nativeSrc": "4947:6:1",
                    "nodeType": "Yulldentifier",
                    "src": "4947:6:1"
                 },
                  {
                    "kind": "number",
                    "nativeSrc": "4955:1:1",
                    "nodeType": "YulLiteral",
                    "src": "4955:1:1",
                    "type": "",
                    "value": "0"
                 }
               ],
               "functionName": {
```

```
"name": "add",
                                                  "nativeSrc": "4943:3:1",
                                                  "nodeType": "Yulldentifier",
                                                  "src": "4943:3:1"
                                                },
                                                "nativeSrc": "4943:14:1",
                                                "nodeType": "YulFunctionCall",
                                                "src": "4943:14:1"
                                             },
                                             {
"496e73756666696369656e74206d61696e6e65742062616c616e63652e",
                                                "kind": "string",
                                                "nativeSrc": "4959:31:1",
                                                "nodeType": "YulLiteral",
                                                "src": "4959:31:1",
                                                "type": "",
                                                "value": "Insufficient mainnet balance."
                                             }
                                          ],
                                           "functionName": {
                                             "name": "mstore",
                                             "nativeSrc": "4936:6:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "4936:6:1"
```

},

"hexValue":

```
"nodeType": "YulFunctionCall",
                                          "src": "4936:55:1"
                                       },
                                       "nativeSrc": "4936:55:1",
                                       "nodeType": "YulExpressionStatement",
                                       "src": "4936:55:1"
                                     }
                                  1
                                },
                                                                                           "name":
"store\_literal\_in\_memory\_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
45",
                                "nativeSrc": "4819:179:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
                                  {
                                     "name": "memPtr",
                                     "nativeSrc": "4917:6:1",
                                     "nodeType": "YulTypedName",
                                     "src": "4917:6:1",
                                     "type": ""
                                  }
                                ],
                                "src": "4819:179:1"
                             },
```

"nativeSrc": "4936:55:1",

```
"body": {
  "nativeSrc": "5150:220:1",
  "nodeType": "YulBlock",
  "src": "5150:220:1",
  "statements": [
     {
       "nativeSrc": "5160:74:1",
       "nodeType": "YulAssignment",
       "src": "5160:74:1",
       "value": {
          "arguments": [
            {
               "name": "pos",
               "nativeSrc": "5226:3:1",
               "nodeType": "Yulldentifier",
               "src": "5226:3:1"
            },
            {
               "kind": "number",
               "nativeSrc": "5231:2:1",
               "nodeType": "YulLiteral",
               "src": "5231:2:1",
               "type": "",
               "value": "29"
            }
```

{

```
],
"functionName": {
```

"name":

```
"array_storeLengthForEncoding_t_string_memory_ptr_fromStack",
                                             "nativeSrc": "5167:58:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "5167:58:1"
                                          },
                                           "nativeSrc": "5167:67:1",
                                           "nodeType": "YulFunctionCall",
                                           "src": "5167:67:1"
                                        },
                                        "variableNames": [
                                          {
                                             "name": "pos",
                                             "nativeSrc": "5160:3:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "5160:3:1"
                                          }
                                        ]
                                     },
                                     {
                                        "expression": {
                                           "arguments": [
                                             {
                                                "name": "pos",
```

```
"nodeType": "Yulldentifier",
                                               "src": "5332:3:1"
                                            }
                                          ],
                                          "functionName": {
                                                                                            "name":
"store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
45",
                                            "nativeSrc": "5243:88:1",
                                            "nodeType": "Yulldentifier",
                                             "src": "5243:88:1"
                                          },
                                          "nativeSrc": "5243:93:1",
                                          "nodeType": "YulFunctionCall",
                                          "src": "5243:93:1"
                                        },
                                        "nativeSrc": "5243:93:1",
                                        "nodeType": "YulExpressionStatement",
                                        "src": "5243:93:1"
                                     },
                                     {
                                        "nativeSrc": "5345:19:1",
                                        "nodeType": "YulAssignment",
                                        "src": "5345:19:1",
                                        "value": {
```

"nativeSrc": "5332:3:1",

```
"arguments": [
  {
     "name": "pos",
     "nativeSrc": "5356:3:1",
     "nodeType": "Yulldentifier",
     "src": "5356:3:1"
  },
  {
     "kind": "number",
     "nativeSrc": "5361:2:1",
     "nodeType": "YulLiteral",
     "src": "5361:2:1",
     "type": "",
     "value": "32"
  }
],
"functionName": {
  "name": "add",
  "nativeSrc": "5352:3:1",
  "nodeType": "Yulldentifier",
  "src": "5352:3:1"
},
"nativeSrc": "5352:12:1",
"nodeType": "YulFunctionCall",
"src": "5352:12:1"
```

},

```
{
                                            "name": "end",
                                            "nativeSrc": "5345:3:1",
                                            "nodeType": "Yulldentifier",
                                            "src": "5345:3:1"
                                         }
                                       1
                                     }
                                  ]
                                },
                                                                                           "name":
"abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45_to_t_string_memory_ptr_fromStack",
                                "nativeSrc": "5004:366:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
                                  {
                                     "name": "pos",
                                     "nativeSrc": "5138:3:1",
                                     "nodeType": "YulTypedName",
                                     "src": "5138:3:1",
                                     "type": ""
                                  }
                               ],
                                "returnVariables": [
```

"variableNames": [

```
{
       "name": "end",
       "nativeSrc": "5146:3:1",
       "nodeType": "YulTypedName",
       "src": "5146:3:1",
       "type": ""
    }
  ],
  "src": "5004:366:1"
},
{
  "body": {
     "nativeSrc": "5547:248:1",
     "nodeType": "YulBlock",
     "src": "5547:248:1",
     "statements": [
       {
          "nativeSrc": "5557:26:1",
          "nodeType": "YulAssignment",
          "src": "5557:26:1",
          "value": {
            "arguments": [
               {
                 "name": "headStart",
                 "nativeSrc": "5569:9:1",
                 "nodeType": "Yulldentifier",
```

```
"src": "5569:9:1"
    },
     {
       "kind": "number",
       "nativeSrc": "5580:2:1",
       "nodeType": "YulLiteral",
       "src": "5580:2:1",
       "type": "",
       "value": "32"
     }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "5565:3:1",
     "nodeType": "Yulldentifier",
     "src": "5565:3:1"
  },
  "nativeSrc": "5565:18:1",
  "nodeType": "YulFunctionCall",
  "src": "5565:18:1"
},
"variableNames": [
  {
     "name": "tail",
     "nativeSrc": "5557:4:1",
     "nodeType": "Yulldentifier",
```

```
"src": "5557:4:1"
    }
  ]
},
{
  "expression": {
     "arguments": [
       {
          "arguments": [
            {
               "name": "headStart",
               "nativeSrc": "5604:9:1",
               "nodeType": "Yulldentifier",
               "src": "5604:9:1"
            },
             {
               "kind": "number",
               "nativeSrc": "5615:1:1",
               "nodeType": "YulLiteral",
               "src": "5615:1:1",
               "type": "",
               "value": "0"
            }
          ],
          "functionName": {
             "name": "add",
```

```
"nativeSrc": "5600:3:1",
     "nodeType": "Yulldentifier",
     "src": "5600:3:1"
  },
  "nativeSrc": "5600:17:1",
  "nodeType": "YulFunctionCall",
  "src": "5600:17:1"
},
{
  "arguments": [
     {
        "name": "tail",
        "nativeSrc": "5623:4:1",
        "nodeType": "Yulldentifier",
        "src": "5623:4:1"
     },
     {
        "name": "headStart",
        "nativeSrc": "5629:9:1",
        "nodeType": "Yulldentifier",
        "src": "5629:9:1"
     }
  ],
  "functionName": {
     "name": "sub",
     "nativeSrc": "5619:3:1",
```

```
"nodeType": "Yulldentifier",
            "src": "5619:3:1"
          },
          "nativeSrc": "5619:20:1",
          "nodeType": "YulFunctionCall",
          "src": "5619:20:1"
       }
     ],
     "functionName": {
       "name": "mstore",
       "nativeSrc": "5593:6:1",
       "nodeType": "Yulldentifier",
       "src": "5593:6:1"
     },
     "nativeSrc": "5593:47:1",
     "nodeType": "YulFunctionCall",
     "src": "5593:47:1"
  },
  "nativeSrc": "5593:47:1",
  "nodeType": "YulExpressionStatement",
  "src": "5593:47:1"
},
{
  "nativeSrc": "5649:139:1",
  "nodeType": "YulAssignment",
  "src": "5649:139:1",
```

```
"arguments": [
                                            {
                                               "name": "tail",
                                               "nativeSrc": "5783:4:1",
                                               "nodeType": "Yulldentifier",
                                               "src": "5783:4:1"
                                             }
                                          ],
                                           "functionName": {
                                                                                            "name":
"abi_encode_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45_to_t_string_memory_ptr_fromStack",
                                             "nativeSrc": "5657:124:1",
                                             "nodeType": "Yulldentifier",
                                             "src": "5657:124:1"
                                          },
                                          "nativeSrc": "5657:131:1",
                                          "nodeType": "YulFunctionCall",
                                          "src": "5657:131:1"
                                        },
                                        "variableNames": [
                                          {
                                             "name": "tail",
                                             "nativeSrc": "5649:4:1",
                                             "nodeType": "Yulldentifier",
```

"value": {

```
}
                                       ]
                                    }
                                  ]
                                },
                                                                                           "name":
"abi_encode_tuple_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc11892297711
67008cf45__to_t_string_memory_ptr__fromStack_reversed",
                                "nativeSrc": "5376:419:1",
                                "nodeType": "YulFunctionDefinition",
                                "parameters": [
                                  {
                                     "name": "headStart",
                                    "nativeSrc": "5527:9:1",
                                     "nodeType": "YulTypedName",
                                     "src": "5527:9:1",
                                     "type": ""
                                  }
                                ],
                                "returnVariables": [
                                  {
                                     "name": "tail",
                                     "nativeSrc": "5542:4:1",
                                    "nodeType": "YulTypedName",
                                     "src": "5542:4:1",
```

"src": "5649:4:1"

```
"type": ""
     }
  ],
  "src": "5376:419:1"
},
{
  "body": {
     "nativeSrc": "5829:152:1",
     "nodeType": "YulBlock",
     "src": "5829:152:1",
     "statements": [
       {
          "expression": {
             "arguments": [
               {
                  "kind": "number",
                  "nativeSrc": "5846:1:1",
                  "nodeType": "YulLiteral",
                  "src": "5846:1:1",
                  "type": "",
                  "value": "0"
               },
               {
                  "kind": "number",
                  "nativeSrc": "5849:77:1",
                  "nodeType": "YulLiteral",
```

```
"type": "",
"35408467139433450592217433187231851964531694900788300625387963629091585785856"
                                            }
                                         ],
                                         "functionName": {
                                            "name": "mstore",
                                            "nativeSrc": "5839:6:1",
                                            "nodeType": "Yulldentifier",
                                            "src": "5839:6:1"
                                         },
                                         "nativeSrc": "5839:88:1",
                                         "nodeType": "YulFunctionCall",
                                         "src": "5839:88:1"
                                       },
                                       "nativeSrc": "5839:88:1",
                                       "nodeType": "YulExpressionStatement",
                                       "src": "5839:88:1"
                                    },
                                    {
                                       "expression": {
                                         "arguments": [
                                            {
                                              "kind": "number",
```

"nativeSrc": "5943:1:1",

"src": "5849:77:1",

"value":

```
"nodeType": "YulLiteral",
       "src": "5943:1:1",
       "type": "",
       "value": "4"
    },
    {
       "kind": "number",
       "nativeSrc": "5946:4:1",
       "nodeType": "YulLiteral",
       "src": "5946:4:1",
       "type": "",
       "value": "0x11"
    }
  ],
  "functionName": {
     "name": "mstore",
     "nativeSrc": "5936:6:1",
     "nodeType": "Yulldentifier",
     "src": "5936:6:1"
  },
  "nativeSrc": "5936:15:1",
  "nodeType": "YulFunctionCall",
  "src": "5936:15:1"
},
"nativeSrc": "5936:15:1",
"nodeType": "YulExpressionStatement",
```

```
"src": "5936:15:1"
},
{
  "expression": {
     "arguments": [
       {
          "kind": "number",
          "nativeSrc": "5967:1:1",
          "nodeType": "YulLiteral",
          "src": "5967:1:1",
          "type": "",
          "value": "0"
       },
       {
          "kind": "number",
          "nativeSrc": "5970:4:1",
          "nodeType": "YulLiteral",
          "src": "5970:4:1",
          "type": "",
          "value": "0x24"
       }
     ],
     "functionName": {
        "name": "revert",
        "nativeSrc": "5960:6:1",
        "nodeType": "Yulldentifier",
```

```
"src": "5960:6:1"
            },
            "nativeSrc": "5960:15:1",
            "nodeType": "YulFunctionCall",
            "src": "5960:15:1"
          },
          "nativeSrc": "5960:15:1",
          "nodeType": "YulExpressionStatement",
          "src": "5960:15:1"
       }
     ]
  },
  "name": "panic_error_0x11",
  "nativeSrc": "5801:180:1",
  "nodeType": "YulFunctionDefinition",
  "src": "5801:180:1"
},
{
  "body": {
     "nativeSrc": "6032:149:1",
     "nodeType": "YulBlock",
     "src": "6032:149:1",
     "statements": [
       {
          "nativeSrc": "6042:25:1",
          "nodeType": "YulAssignment",
```

```
"src": "6042:25:1",
"value": {
  "arguments": [
    {
       "name": "x",
       "nativeSrc": "6065:1:1",
       "nodeType": "Yulldentifier",
       "src": "6065:1:1"
     }
  ],
  "functionName": {
     "name": "cleanup_t_uint256",
     "nativeSrc": "6047:17:1",
     "nodeType": "Yulldentifier",
     "src": "6047:17:1"
  },
  "nativeSrc": "6047:20:1",
  "nodeType": "YulFunctionCall",
  "src": "6047:20:1"
},
"variableNames": [
  {
     "name": "x",
     "nativeSrc": "6042:1:1",
     "nodeType": "Yulldentifier",
     "src": "6042:1:1"
```

```
}
  ]
},
{
  "nativeSrc": "6076:25:1",
  "nodeType": "YulAssignment",
  "src": "6076:25:1",
  "value": {
     "arguments": [
       {
          "name": "y",
          "nativeSrc": "6099:1:1",
          "nodeType": "Yulldentifier",
          "src": "6099:1:1"
       }
     ],
     "functionName": {
       "name": "cleanup_t_uint256",
       "nativeSrc": "6081:17:1",
       "nodeType": "Yulldentifier",
       "src": "6081:17:1"
     },
     "nativeSrc": "6081:20:1",
     "nodeType": "YulFunctionCall",
     "src": "6081:20:1"
  },
```

```
"variableNames": [
     {
       "name": "y",
       "nativeSrc": "6076:1:1",
       "nodeType": "Yulldentifier",
       "src": "6076:1:1"
    }
  ]
},
{
  "nativeSrc": "6110:17:1",
  "nodeType": "YulAssignment",
  "src": "6110:17:1",
  "value": {
     "arguments": [
       {
          "name": "x",
          "nativeSrc": "6122:1:1",
          "nodeType": "Yulldentifier",
          "src": "6122:1:1"
       },
       {
          "name": "y",
          "nativeSrc": "6125:1:1",
          "nodeType": "Yulldentifier",
          "src": "6125:1:1"
```

```
],
     "functionName": {
       "name": "sub",
       "nativeSrc": "6118:3:1",
       "nodeType": "Yulldentifier",
       "src": "6118:3:1"
     },
     "nativeSrc": "6118:9:1",
     "nodeType": "YulFunctionCall",
     "src": "6118:9:1"
  },
  "variableNames": [
    {
       "name": "diff",
       "nativeSrc": "6110:4:1",
       "nodeType": "Yulldentifier",
       "src": "6110:4:1"
     }
  ]
},
{
  "body": {
     "nativeSrc": "6152:22:1",
     "nodeType": "YulBlock",
     "src": "6152:22:1",
```

}

```
{
       "expression": {
          "arguments": [],
          "functionName": {
             "name": "panic_error_0x11",
             "nativeSrc": "6154:16:1",
             "nodeType": "Yulldentifier",
             "src": "6154:16:1"
          },
          "nativeSrc": "6154:18:1",
          "nodeType": "YulFunctionCall",
          "src": "6154:18:1"
       },
       "nativeSrc": "6154:18:1",
       "nodeType": "YulExpressionStatement",
       "src": "6154:18:1"
    }
  ]
},
"condition": {
  "arguments": [
    {
       "name": "diff",
       "nativeSrc": "6143:4:1",
       "nodeType": "Yulldentifier",
```

"statements": [

```
"src": "6143:4:1"
            },
            {
               "name": "x",
               "nativeSrc": "6149:1:1",
               "nodeType": "Yulldentifier",
               "src": "6149:1:1"
             }
          ],
          "functionName": {
             "name": "gt",
             "nativeSrc": "6140:2:1",
             "nodeType": "Yulldentifier",
             "src": "6140:2:1"
          },
          "nativeSrc": "6140:11:1",
          "nodeType": "YulFunctionCall",
          "src": "6140:11:1"
       },
        "nativeSrc": "6137:37:1",
        "nodeType": "Yullf",
        "src": "6137:37:1"
     }
  1
},
"name": "checked_sub_t_uint256",
```

```
"nativeSrc": "5987:194:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "x",
     "nativeSrc": "6018:1:1",
     "nodeType": "YulTypedName",
     "src": "6018:1:1",
     "type": ""
  },
  {
     "name": "y",
     "nativeSrc": "6021:1:1",
     "nodeType": "YulTypedName",
     "src": "6021:1:1",
     "type": ""
  }
],
"returnVariables": [
  {
     "name": "diff",
     "nativeSrc": "6027:4:1",
     "nodeType": "YulTypedName",
     "src": "6027:4:1",
     "type": ""
  }
```

```
],
  "src": "5987:194:1"
},
{
  "body": {
     "nativeSrc": "6231:147:1",
     "nodeType": "YulBlock",
     "src": "6231:147:1",
     "statements": [
       {
          "nativeSrc": "6241:25:1",
          "nodeType": "YulAssignment",
          "src": "6241:25:1",
          "value": {
             "arguments": [
               {
                  "name": "x",
                  "nativeSrc": "6264:1:1",
                  "nodeType": "Yulldentifier",
                  "src": "6264:1:1"
               }
            ],
             "functionName": {
               "name": "cleanup_t_uint256",
               "nativeSrc": "6246:17:1",
               "nodeType": "Yulldentifier",
```

```
"src": "6246:17:1"
     },
     "nativeSrc": "6246:20:1",
     "nodeType": "YulFunctionCall",
     "src": "6246:20:1"
  },
  "variableNames": [
     {
       "name": "x",
       "nativeSrc": "6241:1:1",
       "nodeType": "Yulldentifier",
        "src": "6241:1:1"
     }
  ]
},
{
  "nativeSrc": "6275:25:1",
  "nodeType": "YulAssignment",
  "src": "6275:25:1",
  "value": {
     "arguments": [
       {
          "name": "y",
          "nativeSrc": "6298:1:1",
          "nodeType": "Yulldentifier",
          "src": "6298:1:1"
```

```
}
     ],
     "functionName": {
       "name": "cleanup_t_uint256",
       "nativeSrc": "6280:17:1",
       "nodeType": "Yulldentifier",
       "src": "6280:17:1"
     },
     "nativeSrc": "6280:20:1",
     "nodeType": "YulFunctionCall",
     "src": "6280:20:1"
  },
  "variableNames": [
     {
       "name": "y",
       "nativeSrc": "6275:1:1",
       "nodeType": "Yulldentifier",
       "src": "6275:1:1"
     }
  ]
},
{
  "nativeSrc": "6309:16:1",
  "nodeType": "YulAssignment",
  "src": "6309:16:1",
  "value": {
```

```
"arguments": [
    {
       "name": "x",
       "nativeSrc": "6320:1:1",
       "nodeType": "Yulldentifier",
       "src": "6320:1:1"
    },
    {
       "name": "y",
       "nativeSrc": "6323:1:1",
       "nodeType": "Yulldentifier",
       "src": "6323:1:1"
    }
  ],
  "functionName": {
     "name": "add",
     "nativeSrc": "6316:3:1",
     "nodeType": "Yulldentifier",
     "src": "6316:3:1"
  },
  "nativeSrc": "6316:9:1",
  "nodeType": "YulFunctionCall",
  "src": "6316:9:1"
},
"variableNames": [
  {
```

```
"name": "sum",
       "nativeSrc": "6309:3:1",
       "nodeType": "Yulldentifier",
       "src": "6309:3:1"
    }
  ]
},
{
  "body": {
     "nativeSrc": "6349:22:1",
     "nodeType": "YulBlock",
     "src": "6349:22:1",
     "statements": [
       {
          "expression": {
             "arguments": [],
             "functionName": {
               "name": "panic_error_0x11",
               "nativeSrc": "6351:16:1",
               "nodeType": "Yulldentifier",
               "src": "6351:16:1"
            },
            "nativeSrc": "6351:18:1",
             "nodeType": "YulFunctionCall",
             "src": "6351:18:1"
          },
```

```
"nativeSrc": "6351:18:1",
       "nodeType": "YulExpressionStatement",
       "src": "6351:18:1"
     }
  ]
},
"condition": {
  "arguments": [
    {
       "name": "x",
       "nativeSrc": "6341:1:1",
       "nodeType": "Yulldentifier",
       "src": "6341:1:1"
    },
    {
       "name": "sum",
       "nativeSrc": "6344:3:1",
       "nodeType": "Yulldentifier",
       "src": "6344:3:1"
    }
  ],
  "functionName": {
     "name": "gt",
     "nativeSrc": "6338:2:1",
     "nodeType": "Yulldentifier",
     "src": "6338:2:1"
```

```
},
          "nativeSrc": "6338:10:1",
          "nodeType": "YulFunctionCall",
          "src": "6338:10:1"
       },
       "nativeSrc": "6335:36:1",
       "nodeType": "Yullf",
       "src": "6335:36:1"
     }
  ]
},
"name": "checked_add_t_uint256",
"nativeSrc": "6187:191:1",
"nodeType": "YulFunctionDefinition",
"parameters": [
  {
     "name": "x",
     "nativeSrc": "6218:1:1",
     "nodeType": "YulTypedName",
     "src": "6218:1:1",
     "type": ""
  },
  {
     "name": "y",
     "nativeSrc": "6221:1:1",
     "nodeType": "YulTypedName",
```

```
"src": "6221:1:1",
                                  "type": ""
                                }
                              ],
                              "returnVariables": [
                                {
                                   "name": "sum",
                                   "nativeSrc": "6227:3:1",
                                   "nodeType": "YulTypedName",
                                   "src": "6227:3:1",
                                   "tvpe": ""
                                }
                              ],
                              "src": "6187:191:1"
                           }
                         ]
                       },
                           "contents": "{\n\n function allocate_unbounded() -> memPtr {\n
memPtr
                     mload(64)\n
                                                         n/n
                                                                                     function
revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b() {\n
                          0)\n
            revert(0,
                                                       n/n
                                                                                     function
revert_error_c1322bf8034eace5e0b5c7295db60986aa89aae5e0ea0873e4689e076861a5db() {\n
 revert(0, 0)\n }\n\n function cleanup_t_uint160(value) -> cleaned {\n
                                                                        cleaned := and(value,
}\n\n
                                       function cleanup_t_address(value) -> cleaned {\n
cleaned := cleanup_t_uint160(value)\n }\n\n function validator_revert_t_address(value) {\n
                                                                                           if
iszero(eg(value, cleanup t address(value))) { revert(0, 0) }\n
                                                                        }\n\n
                                                                                     function
```

```
abi decode t address(offset, end) -> value {\n
                                                        value := calldataload(offset)\n
validator_revert_t_address(value)\n }\n\n
                                           function cleanup_t_uint256(value) -> cleaned {\n
cleaned := value\n
                     }\n\n
                            function validator_revert_t_uint256(value) {\n
                                                                             if iszero(eq(value,
cleanup t uint256(value))) { revert(0, 0) }\n }\n\n
                                                   function abi decode t uint256(offset, end) ->
value {\n
               value := calldataload(offset)\n
                                                   validator revert t uint256(value)\n
                                                                                        n/n
function abi_decode_tuple_t_addresst_uint256(headStart, dataEnd) -> value0, value1 {\n
                                                                                              if
                                     headStart),
                                                                     64)
slt(sub(dataEnd,
                                                                                              {
revert error dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b() \\n\n
                                         value0 := abi decode t address(add(headStart, offset),
   {n}n
                let offset := 0\n\n
dataEnd)\n
                    n/n
                                 {n\n}
                                                    let offset := 32\n\
                                                                                     value1 :=
abi_decode_t_uint256(add(headStart, offset), dataEnd)\n
                                                                                       function
                                                                   }\n\n
                                                                             }\n\n
abi_decode_tuple_t_uint256(headStart, dataEnd) -> value0 {\n
                                                                  if slt(sub(dataEnd, headStart),
32) { revert_error_dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b()
n/n
          n/n
                       let offset := 0\n
                                                 value0 := abi decode t uint256(add(headStart,
offset),
          dataEnd)\n
                                                 }\n\n
                                                                    }\n\n
                                                                                       function
abi_encode_t_address_to_t_address_fromStack(value,
                                                      pos)
                                                             {\n
                                                                                   mstore(pos,
cleanup_t_address(value))\n
                                                       }\n\n
                                                                                       function
abi encode_t_uint256_to_t_uint256_fromStack(value,
                                                      pos)
                                                            {\n
                                                                                   mstore(pos,
cleanup t uint256(value))\n
                                                      }\n\n
                                                                                       function
abi_encode_tuple_t_address_t_uint256_t_uint256__to_t_address_t_uint256_t_uint256__fromStack
_reversed(headStart , value2, value1, value0) -> tail {\n
                                                             tail := add(headStart, 96)\n\n
abi_encode_t_address_to_t_address_fromStack(value0,
                                                         add(headStart, 0))\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value1,
                                                        add(headStart, 32))\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value2, add(headStart, 64))\n\n
                                                                               }\n\n
                                                                                       function
abi_decode_tuple_t_address(headStart, dataEnd) -> value0 {\n
                                                                  if slt(sub(dataEnd, headStart),
32) { revert error dbdddcbe895c83990c08b3492a0e83918d802a52331272ac6fdb6a7c4aea3b1b()
```

```
}\n\n
          n/n
                       let offset := 0\n
                                                value0 := abi decode t address(add(headStart,
offset),
          dataEnd)\n
                                                 n/n
                                                                    n/n
                                                                                      function
abi_encode_tuple_t_uint256_t_uint256_t_uint256_t_uint256_t_uint256_fromStack_reversed(headStart ,
value1, value0) -> tail {\n
                                              tail :=
                                                       add(headStart, 64)\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value0,
                                                        add(headStart,
                                                                        0))\n\n
abi_encode_t_uint256_to_t_uint256_fromStack(value1, add(headStart, 32))\n\n
                                                                              n\n
                                                                                      function
abi_encode_tuple_t_uint256__to_t_uint256__fromStack_reversed(headStart, value0) -> tail {\n
tail := add(headStart, 32)\n\n
                                        abi encode t uint256 to t uint256 fromStack(value0,
                               function abi_encode_t_uint256_to_t_uint256(value, pos) {\n
add(headStart, 0))\n\n
                        }\n\n
mstore(pos, cleanup t uint256(value))\n
                                        }\n\n
                                               // struct LiminalFinancialSystem.Ledger -> struct
LiminalFinancialSystem.Ledger\n
                                                                                      function
abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack(val
lue, pos) {\n
                  let tail := add(pos, 0x40)\n\n
                                                  {\n
                                                              // mainnetBalance\n\n
                                                                                           let
memberValue0
                       mload(add(value,
                                            0x00))\n
                  :=
abi_encode_t_uint256_to_t_uint256(memberValue0, add(pos, 0x00))\n
                                                                        }\n\n
                                                                                  {\n
                                                                                            //
testnetBalance\n\n
                                let memberValue0 := mload(add(value, 0x20))\n
abi_encode_t_uint256_to_t_uint256(memberValue0, add(pos, 0x20))\n
                                                                        }\n\n
                                                                               }\n\n
                                                                                      function
abi_encode_tuple_t_struct$_Ledger_$7_memory_ptr__to_t_struct$_Ledger_$7_memory_ptr from
Stack reversed(headStart, value0) -> tail {\n
                                                       tail := add(headStart, 64)\n\n
abi_encode_t_struct$_Ledger_$7_memory_ptr_to_t_struct$_Ledger_$7_memory_ptr_fromStack(value)
lue0.
               add(headStart,
                                  0))\n\n
                                                             n/n
                                                                                      function
array_storeLengthForEncoding_t_string_memory_ptr_fromStack(pos, length) -> updated_pos {\n
   mstore(pos, length)\n
                                    updated_pos := add(pos, 0x20)\n
                                                                            }\n\n
                                                                                      function
store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
                    mstore(add(memPtr, 0), \"Insufficient mainnet balance.\")\n\n }\n\n
45(memPtr) {\n\n
abi encode t stringliteral a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
```

```
cf45_to_t_string_memory_ptr_fromStack(pos)
                                                  end
                                                         {\n
                                                                                    pos
                                                                                           :=
array_storeLengthForEncoding_t_string_memory_ptr_fromStack(pos,
                                                                   29)\n
store_literal_in_memory_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf
45(pos)\n
                               end
                                     :=
                                          add(pos,
                                                     32)\n
                                                                     }\n\n
                                                                                     function
abi_encode_tuple_t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc11892297711
67008cf45__to_t_string_memory_ptr__fromStack_reversed(headStart ) -> tail {\n
                                                                                      tail :=
add(headStart, 32)\n\n
                               mstore(add(headStart, 0), sub(tail, headStart))\n
                                                                                      tail :=
abi encode t stringliteral a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008
cf45 to t string memory ptr fromStack( tail)\n\n
                                                 }\n\n
                                                         function panic error 0x11() {\n
mstore(0,
35408467139433450592217433187231851964531694900788300625387963629091585785856)\n
   mstore(4, 0x11)\n
                        revert(0, 0x24)\n \n\n function checked_sub_t_uint256(x, y) -> diff {\n
   x := cleanup_t_uint256(x)\n
                                 y := cleanup_t_uint256(y)\n
                                                               diff := sub(x, y) \ln n
                                                                                     if gt(diff,
                                    function checked add t uint256(x, y) -> sum \{\n
x) { panic error 0x11() \n\n
                             }\n\n
                                                                                         x :=
cleanup t uint256(x)\n
                          y := cleanup_t_uint256(y)\n
                                                        sum := add(x, y)\n\n
                                                                                if gt(x, sum) {
"id": 1,
                       "language": "Yul",
                       "name": "#utility.yul"
                    }
                  ],
                  "immutableReferences": {},
                  "linkReferences": {},
```

"608060405234801561000f575f80fd5b5060043610610055575f3560e01c806367844d2b146100595 780639ace38c214610075578063b1e1c370146100a7578063b5c604ff146100d8578063f7cd6af9146

"object":

100f6575b5f80fd5b610073600480360381019061006e91906105b5565b610126565b005b61008f60 0480360381019061008a91906105f3565b610424565b60405161009e9392919061063c565b604051 80910390f35b6100c160048036038101906100bc9190610671565b610478565b6040516100cf92919 061069c565b60405180910390f35b6100e0610497565b6040516100ed91906106c3565b604051809 10390f35b610110600480360381019061010b9190610671565b6104a3565b60405161011d9190610 681526020019081526020015f205f015410156101a7576040517f08c379a000000000000000000000 183815260200183815250908060018154018082558091505060019003905f5260205f20906003020 15f909190919091505f820151815f015f6101000a81548173fffffffffffffffffffffffffffffffff021916908373f 167fe3e2e5b15dbd2776222deab4cbd7fb2aeeecfd735eed24e9809b2352f3fa2d375f808573fffffffffffffff 405161041892919061069c565b60405180910390a25050565b60018181548110610433575f80fd5b 16908060010154908060020154905083565b5f602052805f5260405f205f91509050805f0154908060 5f82015481526020016001820154815250509050919050565b60405180604001604052805f815260

28565b9050919050565b61056181610547565b811461056b575f80fd5b50565b5f8135905061057c8 1610558565b92915050565b5f819050919050565b61059481610582565b811461059e575f80fd5b50 565b5f813590506105af8161058b565b92915050565b5f80604083850312156105cb576105ca61052 4565b5b5f6105d88582860161056e565b92505060206105e9858286016105a1565b9150509250929 050565b5f6020828403121561060857610607610524565b5b5f610615848285016105a1565b91505 092915050565b61062781610547565b82525050565b61063681610582565b82525050565b5f60608 201905061064f5f83018661061e565b61065c602083018561062d565b610669604083018461062d5 65b949350505050565b5f6020828403121561068657610685610524565b5b5f61069384828501610 56e565b91505092915050565b5f6040820190506106af5f83018561062d565b6106bc602083018461 062d565b9392505050565b5f6020820190506106d65f83018461062d565b92915050565b6106e581 610582565b82525050565b604082015f8201516106ff5f8501826106dc565b5060208201516107126 0208501826106dc565b50505050565b5f60408201905061072b5f8301846106eb565b92915050565 b5f82825260208201905092915050565b7f496e73756666696369656e74206d61696e6e657420626 16c616e63652e0000005f82015250565b5f610775601d83610731565b915061078082610741565b6 02082019050919050565b5f6020820190508181035f8301526107a281610769565b9050919050565 260245ffd5b5f6107e082610582565b91506107eb83610582565b9250828203905081811115610803 576108026107a9565b5b92915050565b5f61081382610582565b915061081e83610582565b925082 8201905080821115610836576108356107a9565b5b9291505056fea26469706673582212200a5a0f 838d14ab827bd80c3be88fe223705850e5e032f9b180cc58570fa631ed64736f6c63430008190033".

"opcodes": "PUSH1 0x80 PUSH1 0x40 MSTORE CALLVALUE DUP1 ISZERO PUSH2 0xF JUMPI PUSH0 DUP1 REVERT JUMPDEST POP PUSH1 0x4 CALLDATASIZE LT PUSH2 0x55 JUMPI PUSH0 CALLDATALOAD PUSH1 0xE0 SHR DUP1 PUSH4 0x67844D2B EQ PUSH2 0x59 JUMPI DUP1 PUSH4 0x9ACE38C2 EQ PUSH2 0x75 JUMPI DUP1 PUSH4 0xB1E1C370 EQ PUSH2 0xA7 JUMPI DUP1 PUSH4 0xB5C604FF EQ PUSH2 0xD8 JUMPI DUP1

PUSH4 0xF7CD6AF9 EQ PUSH2 0xF6 JUMPI JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH2 0x73 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x6E SWAP2 SWAP1 PUSH2 0x5B5 JUMP JUMPDEST PUSH2 0x126 JUMP JUMPDEST STOP JUMPDEST PUSH2 0x8F PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x8A SWAP2 SWAP1 PUSH2 0x5F3 JUMP JUMPDEST PUSH2 0x424 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x9E SWAP4 SWAP3 SWAP2 SWAP1 PUSH2 0x63C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xC1 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0xBC SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x478 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xCF SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0xE0 PUSH2 0x497 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0xED SWAP2 SWAP1 PUSH2 0x6C3 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST PUSH2 0x110 PUSH1 0x4 DUP1 CALLDATASIZE SUB DUP2 ADD SWAP1 PUSH2 0x10B SWAP2 SWAP1 PUSH2 0x671 JUMP JUMPDEST PUSH2 0x4A3 JUMP JUMPDEST PUSH1 0x40 MLOAD PUSH2 0x11D SWAP2 SWAP1 PUSH2 0x718 JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 RETURN JUMPDEST DUP1 0x20 ADD SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD SLOAD LT ISZERO PUSH2 0x1A7 JUMPI PUSH1 0x40 MLOAD PUSH32 PUSH1 0x4 ADD PUSH2 0x19E SWAP1 PUSH2 0x78B JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 REVERT JUMPDEST DUP1 PUSH0 DUP1 DUP5 PUSH20 AND PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x1F4 SWAP2 SWAP1 PUSH2 0x7D6 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP DUP1 PUSH0 DUP1 DUP5 PUSH₂₀ AND PUSH20 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD PUSH0 DUP3 DUP3 SLOAD PUSH2 0x249 SWAP2 SWAP1 PUSH2 0x809 JUMP JUMPDEST SWAP3 POP POP DUP2 SWAP1 SSTORE POP PUSH1 0x1 PUSH1 0x40 MLOAD DUP1 PUSH1 0x60 ADD PUSH1 AND DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE PUSH1 0x20 ADD DUP4 DUP2 MSTORE POP SWAP1 DUP1 PUSH1 0x1 DUP2 SLOAD ADD DUP1 DUP3 SSTORE DUP1 SWAP2 POP POP PUSH1 0x1 SWAP1 SUB SWAP1 PUSH0 MSTORE PUSH1 0x20 PUSH0 KECCAK256 SWAP1 PUSH1 0x3 MUL ADD PUSH0 SWAP1 SWAP2 SWAP1 SWAP2 SWAP1 SWAP2 POP PUSH0 DUP3 ADD MLOAD DUP2 PUSH0 ADD PUSH0 PUSH2 0x100 EXP DUP2 SWAP1 SSTORE POP PUSH1 0x20 DUP3 ADD MLOAD DUP2 PUSH1 0x1 ADD SSTORE PUSH1 0x40 DUP3 ADD MLOAD DUP2 PUSH1 0x2 ADD SSTORE POP POP DUP2 PUSH20 AND PUSH32 0x7772D368CD3CC6FA8DC9C0956D36DD1243D603ABC8D99496F89D0E6950D80DDE DUP3 DUP4 PUSH1 0x40 MLOAD PUSH2 0x34B SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 LOG2 DUP2 PUSH20 AND PUSH32 0xE3E2E5B15DBD2776222DEAB4CBD7FB2AEEECFD735EED24E9809B2352F3FA2D37 PUSH0 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH0 ADD SLOAD PUSH0 SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x1 ADD SLOAD PUSH1 0x40 MLOAD PUSH2 0x418 SWAP3 SWAP2 SWAP1 PUSH2 0x69C JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 SWAP2 SUB SWAP1 LOG2 POP POP JUMP JUMPDEST PUSH1 0x1 DUP2 DUP2 SLOAD DUP2 LT PUSH2 0x433 JUMPI PUSH0 DUP1 REVERT JUMPDEST SWAP1 PUSH0 MSTORE PUSH1 0x20 PUSH0 KECCAK256 SWAP1 PUSH1 0x3 MUL ADD PUSH0 SWAP2 POP SWAP1 POP DUP1 PUSH0 ADD PUSH0 SWAP1 SLOAD SWAP1 PUSH2 0x100 DUP1 PUSH1 0x1 ADD SLOAD SWAP1 DUP1 PUSH1 0x2 ADD SLOAD SWAP1 POP DUP4 JUMP JUMPDEST PUSH0 PUSH1 0x20 MSTORE DUP1 PUSH0 MSTORE PUSH1 0x40 PUSH0 KECCAK256 PUSH0 SWAP2 POP SWAP1 POP DUP1 PUSH0 ADD SLOAD SWAP1 DUP1 PUSH1 0x1 ADD SLOAD SWAP1 POP DUP3 JUMP JUMPDEST PUSH0 PUSH1 0x1 DUP1 SLOAD SWAP1 POP SWAP1 POP SWAP1 JUMP JUMPDEST PUSH2 0x4AB PUSH2 0x50C **JUMPDEST** JUMP PUSH₀ DUP1 DUP4 PUSH20 AND PUSH₂₀ SWAP1 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 KECCAK256 PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE SWAP1 DUP2 PUSH0 DUP3 ADD SLOAD DUP2 MSTORE PUSH1 0x20 ADD PUSH1 0x1 DUP3 ADD SLOAD DUP2 MSTORE POP POP SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH1 0x40 MLOAD DUP1 PUSH1 0x40 ADD PUSH1 0x40 MSTORE DUP1 PUSH0 DUP2 MSTORE PUSH1 0x20 ADD PUSH0 DUP2 MSTORE POP SWAP1 JUMP JUMPDEST PUSH0 DUP1 REVERT JUMPDEST PUSH0 PUSH20 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH2 0x551 DUP3 PUSH2 0x528 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x561 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP2 EQ PUSH2 0x56B JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSH0 DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x57C DUP2 PUSH2 0x558 JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP2 SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH2 0x594 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP2 EQ PUSH2 0x59E JUMPI PUSH0 DUP1 REVERT JUMPDEST POP JUMP JUMPDEST PUSH0 DUP2 CALLDATALOAD SWAP1 POP PUSH2 0x5AF DUP2 PUSH2 0x58B JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP1 PUSH1 0x40 DUP4 DUP6 SUB SLT ISZERO PUSH2 0x5CB JUMPI PUSH2 0x5CA PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSHO PUSH2 0x5D8 DUP6 DUP3 DUP7 ADD PUSH2 0x56E JUMP JUMPDEST SWAP3 POP POP PUSH1 0x20 PUSH2 0x5E9 DUP6 DUP3 DUP7 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 POP SWAP3 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x608 JUMPI PUSH2 0x607 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x615 DUP5 DUP3 DUP6 ADD PUSH2 0x5A1 JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x627 DUP2 PUSH2 0x547 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH2 0x636 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH0 PUSH1 0x60 DUP3 ADD SWAP1 POP PUSH2 0x64F PUSH0 DUP4 ADD DUP7 PUSH2 0x61E JUMP JUMPDEST PUSH2 0x65C PUSH1 0x20 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x669 PUSH1 0x40 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP5 SWAP4 POP POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 DUP5 SUB SLT ISZERO PUSH2 0x686 JUMPI PUSH2 0x685 PUSH2 0x524 JUMP JUMPDEST JUMPDEST PUSH0 PUSH2 0x693 DUP5 DUP3 DUP6 ADD PUSH2 0x56E JUMP JUMPDEST SWAP2 POP POP SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x6AF PUSH0 DUP4 ADD DUP6 PUSH2 0x62D JUMP JUMPDEST PUSH2 0x6BC PUSH1 0x20 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP4 SWAP3 POP POP POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP PUSH2 0x6D6 PUSH0 DUP4 ADD DUP5 PUSH2 0x62D JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH2 0x6E5 DUP2 PUSH2 0x582 JUMP JUMPDEST DUP3 MSTORE POP POP JUMP JUMPDEST PUSH1 0x40 DUP3 ADD PUSH0 DUP3 ADD MLOAD PUSH2 0x6FF PUSH0 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP PUSH1 0x20 DUP3 ADD MLOAD PUSH2 0x712 PUSH1 0x20 DUP6 ADD DUP3 PUSH2 0x6DC JUMP JUMPDEST POP POP POP JUMP JUMPDEST PUSHO PUSH1 0x40 DUP3 ADD SWAP1 POP PUSH2 0x72B PUSH0 DUP4 ADD DUP5 PUSH2 0x6EB JUMP JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 DUP3 DUP3 MSTORE PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP3 SWAP2 POP **JUMPDEST** POP JUMP PUSH32 0x496E73756666696369656E74206D61696E6E65742062616C616E63652E000000 PUSH0 DUP3 ADD MSTORE POP JUMP JUMPDEST PUSH0 PUSH2 0x775 PUSH1 0x1D DUP4 PUSH2 0x731 JUMP JUMPDEST SWAP2 POP PUSH2 0x780 DUP3 PUSH2 0x741 JUMP JUMPDEST PUSH1 0x20 DUP3 ADD SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH0 PUSH1 0x20 DUP3 ADD SWAP1 POP DUP2 DUP2 SUB PUSH0 DUP4 ADD MSTORE PUSH2 0x7A2 DUP2 PUSH2 0x769 JUMP JUMPDEST SWAP1 POP SWAP2 SWAP1 POP JUMP JUMPDEST PUSH32 PUSH₀ MSTORE PUSH1 0x11 PUSH1 0x4 MSTORE PUSH1 0x24 PUSH0 REVERT JUMPDEST PUSH0 PUSH2 0x7E0 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP2 POP PUSH2 0x7EB DUP4 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 SUB SWAP1 POP DUP2 DUP2 GT ISZERO PUSH2 0x803 JUMPI PUSH2 0x802 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP JUMPDEST PUSH0 PUSH2 0x813 DUP3 PUSH2 0x582 JUMP JUMPDEST SWAP2 POP PUSH2 0x81E DUP4 PUSH2 0x582 JUMP JUMPDEST SWAP3 POP DUP3 DUP3 ADD SWAP1 POP DUP1 DUP3 GT ISZERO PUSH2 0x836 JUMPI PUSH2 0x835 PUSH2 0x7A9 JUMP JUMPDEST JUMPDEST SWAP3 SWAP2 POP POP JUMP INVALID LOG2 PUSH5 0x6970667358 0x22 SLT KECCAK256 EXP GAS 0xF DUP4 DUP14 EQ 0xAB DUP3 PUSH28 0xD80C3BE88FE223705850E5E032F9B180CC58570FA631ED64736F6C63 NUMBER

"sourceMap":

1000 0000 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1
"393:2830:0:-:0;;;;;;;;;;;;;;;;;;;;;1992:648;;;;;;;;;;;;;;;;;;;;;1082:33;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
-;;:::i;:::-;;;;;;3116:105;;;:::i;:::-;;;;;;;;
2845:120;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;:35;;;:45;;2076:87;;;;;;;;;;;;;;;2265:6;2226:7;:20;2234:11;2226:20;;;;;;;;;;;35;;;:45;;;;;;;;;
-;;;;;;2320:6;2281:7;:20;2289:11;2281:20;;;;;;;;35;;;45;;;;;;;;;2368:12;2386:40;;;;;;239
8:11;2386:40;;;;;2411:6;2386:40;;;;2419:6;2386:40;;;2368:59;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;;;;;;;;;;2460:11;2442:46;;;2473:6;2481;2442:46;;;;;;;;;;;;;;2547:11;2533:100;;;2560:7;:20;25
68:11;2560:20;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
2:648;;:::0;1082:33::-;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
3169:7;3195:12;:19;;;;3188:26;;3116:105;:::0;2845:120::-;2906:13;;:::i;:::-;2938:7;:20;2946:11;2938:2
0;;;;;;;;2931:27;;;;;;;;;2845:120;;;::o;-1:-1:-1:-;;;;;;;;;;;;;;;;;;;;;;;
7:12;334:126;371:7;411:42;404:5;400:54;389:65;;334:126;;;:o;466:96::-;503:7;532:24;550:5;532:24
;:::i;:::-;521:35;;466:96;;;:::0;568:122::-;641:24;659:5;641:24;:::i;:::-;634:5;631:35;621:63;;680:1;677;6
70:12;621:63;568:122;:::0;696:139::-;742:5;780:6;767:20;758:29;;796:33;823:5;796:33;:::i;:::-;696:13
9;;;;:::0;841:77::-;878:7;907:5;896:16;;841:77;;;:::0;924:122::-;997:24;1015:5;997:24;:::i;:::-;990:5;987
:35;977:63;;1036:1;1033;1026:12;977:63;924:122;:::0;1052:139::-;1098:5;1136:6;1123:20;1114:29;;
1152:33;1179:5;1152:33;:::i;:::-;1052:139;;;;:::o;1197:474::-;1265:6;1273;1322:2;1310:9;1301:7;1297
:23;1293:32;1290:119;;;1328:79;;:::i;:::-;1290:119;1448:1;1473:53;1518:7;1509:6;1498:9;1494:22;14
73:53;:::i;:::-;1463:63;;1419:117;1575:2;1601:53;1646:7;1637:6;1626:9;1622:22;1601:53;:::i;:::-;1591
:63;;1546:118;1197:474;;;;:::0;1677:329::-;1736:6;1785:2;1773:9;1764:7;1760:23;1756:32;1753:119
;;;1791:79;;:::i;:::-;1753:119;1911:1;1936:53;1981:7;1972:6;1961:9;1957:22;1936:53;:::i;:::-;1926:63;;
1882:117;1677:329;;;;:::0;2012:118::-;2099:24;2117:5;2099:24;:::i;:::-;2094:3;2087:37;2012:118;;:::0;
2136:::-;2223:24;2241:5;2223:24;:::i;:::-;2218:3;2211:37;2136:118;;:::o;2260:442::-;2409:4;2447:2;24
36:9;2432:18;2424:26;;2460:71;2528:1;2517:9;2513:17;2504:6;2460:71;:::i;:::-;2541:72;2609:2;2598

```
:9;2594:18;2585:6;2541:72;:::i;:::-;2623;2691:2;2680:9;2676:18;2667:6;2623:72;:::i;:::-;2260:442;;;;;:
::0;2708:329::-;2767:6;2816:2;2804:9;2795:7;2791:23;2787:32;2784:119;;;2822:79;;:::i;:::-;2784:119;
2942:1;2967:53;3012:7;3003:6;2992:9;2988:22;2967:53;:::i;:::-;2957:63;;2913:117;2708:329;;;;:::o;3
043:332::-;3164:4;3202:2;3191:9;3187:18;3179:26;;3215:71;3283:1;3272:9;3268:17;3259:6;3215:71
;:::i;:::-;3296:72;3364:2;3353:9;3349:18;3340:6;3296:72;:::i;:::-;3043:332;;;;;:::o;3381:222::-;3474:4;3
512:2;3501:9;3497:18;3489:26;;3525:71;3593:1;3582:9;3578:17;3569:6;3525:71;:::i;:::-;3381:222;;;;
::0;3609:108::-;3686:24;3704:5;3686:24;:::i;:::-;3681:3;3674:37;3609:108;;:::0;3807:519::-;3946:4;39
41:3;3937:14;4043:4;4036:5;4032:16;4026:23;4062:63;4119:4;4114:3;4110:14;4096:12;4062:63;...;
:::-;3961:174;4227:4;4220:5;4216:16;4210:23;4246:63;4303:4;4298:3;4294:14;4280:12;4246:63;:::i;:
::-;4145:174;3915:411;3807:519;;:::o;4332:306::-;4467:4;4505:2;4494:9;4490:18;4482:26;;4518:113;
4628:1;4617:9;4613:17;4604:6;4518:113;...;4332:306;;;;...o;4644:169::-;4728:11;4762:6;4757:3;
4750:19;4802:4;4797:3;4793:14;4778:29;;4644:169;;;;:::0;4819:179::-;4959:31;4955:1;4947:6;4943:
14;4936:55;4819:179;...:0;5004:366::-;5146:3;5167:67;5231:2;5226:3;5167:67;...:;.::-;5160:74;;5243:
93;5332:3;5243:93;:::i;:::-;5361:2;5356:3;5352:12;5345:19;;5004:366;;::::0;5376:419::-;5542:4;5580:
2;5569:9;5565:18;5557:26;;5629:9;5623:4;5619:20;5615:1;5604:9;5600:17;5593:47;5657:131;5783:
4;5657:131;:::i;:::-;5649:139;;5376:419;;;:::0;5801:180::-;5849:77;5846:1;5839:88;5946:4;5943:1;593
6:15;5970:4;5967:1;5960:15;5987:194;6027:4;6047:20;6065:1;6047:20;:::i;:::-;6042:25;;6081:20;609
9:1;6081:20;:::i;:::-;6076:25;;6125:1;6122;6118:9;6110:17;;6149:1;6143:4;6140:11;6137:37;;;6154:1
8;;;;;;-;6137:37;5987:194;;;;::0;6187:191::-;6227:3;6246:20;6264:1;6246:20;;;;;-;6241:25;;6280:
20;6298:1;6280:20;:::i;:::-;6275:25;;6323:1;6320;6316:9;6309:16;;6344:3;6341:1;6338:10;6335:36;;;
6351:18;;:::i;:::-;6335:36;6187:191;;;;:::o"
                 },
                 "gasEstimates": {
                   "creation": {
                      "codeDepositCost": "432400",
```

"executionCost": "44879",

```
"totalCost": "477279"
  },
  "external": {
     "getLedger(address)": "infinite",
     "getTotalTransactions()": "2484",
     "ledgers(address)": "infinite",
     "performTransaction(address,uint256)": "infinite",
     "transactions(uint256)": "infinite"
  }
},
"legacyAssembly": {
  ".code": [
     {
        "begin": 393,
        "end": 3223,
        "name": "PUSH",
        "source": 0,
        "value": "80"
     },
     {
        "begin": 393,
        "end": 3223,
        "name": "PUSH",
        "source": 0,
        "value": "40"
     },
```

```
{
  "begin": 393,
  "end": 3223,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 1456,
  "end": 1725,
  "name": "CALLVALUE",
  "source": 0
},
{
  "begin": 1456,
  "end": 1725,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1456,
  "end": 1725,
  "name": "ISZERO",
  "source": 0
},
{
  "begin": 1456,
```

```
"end": 1725,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "1"
},
{
  "begin": 1456,
  "end": 1725,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 1456,
  "end": 1725,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1456,
  "end": 1725,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1456,
```

```
"end": 1725,
  "name": "REVERT",
  "source": 0
},
{
  "begin": 1456,
  "end": 1725,
  "name": "tag",
  "source": 0,
  "value": "1"
},
{
  "begin": 1456,
  "end": 1725,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1456,
  "end": 1725,
  "name": "POP",
  "source": 0
},
{
  "begin": 1608,
  "end": 1612,
```

```
"name": "PUSH",
  "source": 0,
  "value": "3E8"
},
{
  "begin": 1571,
  "end": 1578,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1571,
  "end": 1590,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1579,
  "end": 1589,
  "name": "CALLER",
  "source": 0
},
{
  "begin": 1571,
  "end": 1590,
```

```
"name": "PUSH",
 "source": 0,
 },
{
 "begin": 1571,
 "end": 1590,
 "name": "AND",
 "source": 0
},
{
 "begin": 1571,
 "end": 1590,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 1571,
 "end": 1590,
 "name": "AND",
 "source": 0
},
{
 "begin": 1571,
 "end": 1590,
```

```
"name": "DUP2",
  "source": 0
},
{
  "begin": 1571,
  "end": 1590,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 1571,
  "end": 1590,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 1571,
  "end": 1590,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1571,
  "end": 1590,
  "name": "SWAP1",
```

```
"source": 0
},
{
  "begin": 1571,
  "end": 1590,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1571,
  "end": 1590,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 1571,
  "end": 1590,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 1571,
  "end": 1590,
  "name": "ADD",
  "source": 0
```

```
},
{
  "begin": 1571,
  "end": 1590,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1571,
  "end": 1590,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 1571,
  "end": 1605,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1571,
  "end": 1605,
  "name": "ADD",
  "source": 0
```

```
},
{
  "begin": 1571,
  "end": 1612,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1571,
  "end": 1612,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1571,
  "end": 1612,
  "name": "SSTORE",
  "source": 0
},
{
  "begin": 1571,
  "end": 1612,
  "name": "POP",
  "source": 0
},
{
```

```
"begin": 1687,
  "end": 1690,
  "name": "PUSH",
  "source": 0,
  "value": "1F4"
},
{
  "begin": 1650,
  "end": 1657,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1650,
  "end": 1669,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1658,
  "end": 1668,
  "name": "CALLER",
  "source": 0
},
{
```

```
"begin": 1650,
 "end": 1669,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 1650,
 "end": 1669,
 "name": "AND",
 "source": 0
},
{
 "begin": 1650,
 "end": 1669,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 1650,
 "end": 1669,
 "name": "AND",
 "source": 0
},
{
```

```
"begin": 1650,
  "end": 1669,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1650,
  "end": 1669,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 1650,
  "end": 1669,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 1650,
  "end": 1669,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1650,
```

```
"end": 1669,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1650,
  "end": 1669,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1650,
  "end": 1669,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 1650,
  "end": 1669,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 1650,
  "end": 1669,
```

```
"name": "ADD",
  "source": 0
},
{
  "begin": 1650,
  "end": 1669,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1650,
  "end": 1669,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 1650,
  "end": 1684,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 1650,
  "end": 1684,
```

```
"name": "ADD",
  "source": 0
},
{
  "begin": 1650,
  "end": 1690,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1650,
  "end": 1690,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1650,
  "end": 1690,
  "name": "SSTORE",
  "source": 0
},
{
  "begin": 1650,
  "end": 1690,
  "name": "POP",
  "source": 0
```

```
{
               "begin": 393,
               "end": 3223,
               "name": "PUSH #[$]",
               "source": 0,
                                                        "value":
},
             {
               "begin": 393,
               "end": 3223,
               "name": "DUP1",
               "source": 0
             },
             {
               "begin": 393,
               "end": 3223,
               "name": "PUSH [$]",
               "source": 0,
                                                        "value":
},
             {
               "begin": 393,
               "end": 3223,
```

},

```
"name": "PUSH",
     "source": 0,
     "value": "0"
  },
  {
     "begin": 393,
     "end": 3223,
     "name": "CODECOPY",
     "source": 0
  },
  {
     "begin": 393,
     "end": 3223,
     "name": "PUSH",
     "source": 0,
     "value": "0"
  },
  {
     "begin": 393,
     "end": 3223,
     "name": "RETURN",
     "source": 0
  }
],
".data": {
  "0": {
```

"a26469706673582212200a5a0f838d14ab827bd80c3be88fe223705850e5e032f9b180cc58570fa63 1ed64736f6c63430008190033",

```
".code": [
  {
    "begin": 393,
    "end": 3223,
    "name": "PUSH",
    "source": 0,
    "value": "80"
  },
  {
     "begin": 393,
    "end": 3223,
    "name": "PUSH",
    "source": 0,
    "value": "40"
  },
  {
    "begin": 393,
    "end": 3223,
    "name": "MSTORE",
    "source": 0
  },
  {
    "begin": 393,
```

```
"end": 3223,
  "name": "CALLVALUE",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "ISZERO",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "1"
},
{
  "begin": 393,
  "end": 3223,
```

```
"name": "JUMPI",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "REVERT",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "tag",
```

```
"source": 0,
  "value": "1"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "POP",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "4"
},
{
  "begin": 393,
  "end": 3223,
  "name": "CALLDATASIZE",
```

```
"source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "LT",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "2"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
```

```
"value": "0"
},
{
  "begin": 393,
  "end": 3223,
  "name": "CALLDATALOAD",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "E0"
},
{
  "begin": 393,
  "end": 3223,
  "name": "SHR",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
```

```
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "67844D2B"
},
{
  "begin": 393,
  "end": 3223,
  "name": "EQ",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "3"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPI",
  "source": 0
```

```
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "9ACE38C2"
},
{
  "begin": 393,
  "end": 3223,
  "name": "EQ",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "4"
```

```
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "B1E1C370"
},
{
  "begin": 393,
  "end": 3223,
  "name": "EQ",
  "source": 0
},
```

```
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "5"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "B5C604FF"
},
```

```
{
  "begin": 393,
  "end": 3223,
  "name": "EQ",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "6"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
```

```
"begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "F7CD6AF9"
},
{
  "begin": 393,
  "end": 3223,
  "name": "EQ",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "7"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPI",
  "source": 0
},
{
```

```
"begin": 393,
  "end": 3223,
  "name": "tag",
  "source": 0,
  "value": "2"
},
{
  "begin": 393,
  "end": 3223,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 393,
  "end": 3223,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 393,
  "end": 3223,
  "name": "DUP1",
  "source": 0
},
{
```

```
"begin": 393,
  "end": 3223,
  "name": "REVERT",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "tag",
  "source": 0,
  "value": "3"
},
{
  "begin": 1992,
  "end": 2640,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "8"
},
{
```

```
"begin": 1992,
  "end": 2640,
  "name": "PUSH",
  "source": 0,
  "value": "4"
},
{
  "begin": 1992,
  "end": 2640,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "CALLDATASIZE",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "SUB",
  "source": 0
},
{
  "begin": 1992,
```

```
"end": 2640,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "9"
},
{
  "begin": 1992,
  "end": 2640,
```

```
"name": "SWAP2",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "10"
},
{
  "begin": 1992,
  "end": 2640,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
```

```
"name": "tag",
  "source": 0,
  "value": "9"
},
{
  "begin": 1992,
  "end": 2640,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "11"
},
{
  "begin": 1992,
  "end": 2640,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 1992,
```

```
"end": 2640,
  "name": "tag",
  "source": 0,
  "value": "8"
},
{
  "begin": 1992,
  "end": 2640,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "STOP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "tag",
  "source": 0,
  "value": "4"
},
{
  "begin": 1082,
```

```
"end": 1115,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "12"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "4"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1082,
```

```
"end": 1115,
  "name": "CALLDATASIZE",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SUB",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
```

```
"source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "13"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
  "source": 0,
```

```
"value": "14"
},
{
  "begin": 1082,
  "end": 1115,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "tag",
  "source": 0,
  "value": "13"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
```

```
"source": 0,
  "value": "15"
},
{
  "begin": 1082,
  "end": 1115,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "tag",
  "source": 0,
  "value": "12"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "16"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP4",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "SWAP3",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "17"
},
{
  "begin": 1082,
  "end": 1115,
  "jumpType": "[in]",
```

```
"name": "JUMP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "tag",
  "source": 0,
  "value": "16"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "MLOAD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SUB",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
```

```
},
{
  "begin": 1082,
  "end": 1115,
  "name": "RETURN",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "tag",
  "source": 0,
  "value": "5"
},
{
  "begin": 982,
  "end": 1023,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "18"
```

```
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "4"
},
{
  "begin": 982,
  "end": 1023,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "CALLDATASIZE",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SUB",
  "source": 0
},
```

```
{
  "begin": 982,
  "end": 1023,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "ADD",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "19"
},
{
```

```
"begin": 982,
  "end": 1023,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "20"
},
{
  "begin": 982,
  "end": 1023,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
```

```
"begin": 982,
  "end": 1023,
  "name": "tag",
  "source": 0,
  "value": "19"
},
{
  "begin": 982,
  "end": 1023,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "21"
},
{
  "begin": 982,
  "end": 1023,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
```

```
{
  "begin": 982,
  "end": 1023,
  "name": "tag",
  "source": 0,
  "value": "18"
},
{
  "begin": 982,
  "end": 1023,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 982,
  "end": 1023,
  "name": "MLOAD",
  "source": 0
},
```

```
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "22"
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP3",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
```

```
"begin": 982,
  "end": 1023,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "23"
},
{
  "begin": 982,
  "end": 1023,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "tag",
  "source": 0,
  "value": "22"
},
{
  "begin": 982,
  "end": 1023,
  "name": "JUMPDEST",
  "source": 0
},
```

```
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 982,
  "end": 1023,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP2",
  "source": 0
},
{
```

```
"begin": 982,
  "end": 1023,
  "name": "SUB",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "RETURN",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "tag",
  "source": 0,
  "value": "6"
},
{
  "begin": 3116,
```

```
"end": 3221,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "24"
},
{
  "begin": 3116,
  "end": 3221,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "25"
},
{
  "begin": 3116,
  "end": 3221,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
```

```
"begin": 3116,
  "end": 3221,
  "name": "tag",
  "source": 0,
  "value": "24"
},
{
  "begin": 3116,
  "end": 3221,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 3116,
  "end": 3221,
  "name": "MLOAD",
  "source": 0
},
{
```

```
"begin": 3116,
  "end": 3221,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "26"
},
{
  "begin": 3116,
  "end": 3221,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "27"
},
{
```

```
"begin": 3116,
  "end": 3221,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "tag",
  "source": 0,
  "value": "26"
},
{
  "begin": 3116,
  "end": 3221,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
```

```
{
  "begin": 3116,
  "end": 3221,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "SUB",
  "source": 0
},
{
  "begin": 3116,
```

```
"end": 3221,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "RETURN",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "tag",
  "source": 0,
  "value": "7"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
```

```
"name": "PUSH [tag]",
  "source": 0,
  "value": "28"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH",
  "source": 0,
  "value": "4"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "CALLDATASIZE",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
```

```
"name": "SUB",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH [tag]",
  "source": 0,
```

```
"value": "29"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "20"
},
{
  "begin": 2845,
  "end": 2965,
  "jumpType": "[in]",
  "name": "JUMP",
```

```
"source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "tag",
  "source": 0,
  "value": "29"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "30"
},
{
  "begin": 2845,
  "end": 2965,
  "jumpType": "[in]",
```

```
"name": "JUMP",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "tag",
  "source": 0,
  "value": "28"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2845,
  "end": 2965,
```

```
"name": "MLOAD",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "31"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "PUSH [tag]",
```

```
"source": 0,
  "value": "32"
},
{
  "begin": 2845,
  "end": 2965,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "tag",
  "source": 0,
  "value": "31"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
```

```
"name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SUB",
```

```
"source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "RETURN",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "tag",
  "source": 0,
  "value": "11"
},
{
  "begin": 1992,
  "end": 2640,
  "name": "JUMPDEST",
  "source": 0
```

```
},
{
  "begin": 2123,
  "end": 2129,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2084,
  "end": 2091,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2084,
  "end": 2104,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2092,
  "end": 2103,
  "name": "DUP5",
  "source": 0
},
```

```
{
 "begin": 2084,
 "end": 2104,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 2084,
 "end": 2104,
 "name": "AND",
 "source": 0
},
{
 "begin": 2084,
 "end": 2104,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 2084,
 "end": 2104,
 "name": "AND",
 "source": 0
},
```

```
{
  "begin": 2084,
  "end": 2104,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2084,
  "end": 2104,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2084,
  "end": 2104,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2084,
  "end": 2104,
  "name": "ADD",
  "source": 0
},
{
```

```
"begin": 2084,
  "end": 2104,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2084,
  "end": 2104,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2084,
  "end": 2104,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2084,
  "end": 2104,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2084,
```

```
"end": 2104,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2084,
  "end": 2104,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2084,
  "end": 2104,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 2084,
  "end": 2119,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2084,
```

```
"end": 2119,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2084,
  "end": 2119,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2084,
  "end": 2129,
  "name": "LT",
  "source": 0
},
{
  "begin": 2084,
  "end": 2129,
  "name": "ISZERO",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH [tag]",
```

```
"source": 0,
  "value": "34"
},
{
  "begin": 2076,
  "end": 2163,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2076,
  "end": 2163,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH",
```



```
},
{
  "begin": 2076,
  "end": 2163,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH",
  "source": 0,
  "value": "4"
},
{
  "begin": 2076,
  "end": 2163,
```

```
"name": "ADD",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "35"
},
{
  "begin": 2076,
  "end": 2163,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "36"
},
{
  "begin": 2076,
  "end": 2163,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "tag",
  "source": 0,
  "value": "35"
},
{
  "begin": 2076,
  "end": 2163,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2076,
```

```
"end": 2163,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "SUB",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "SWAP1",
```

```
"source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "REVERT",
  "source": 0
},
{
  "begin": 2076,
  "end": 2163,
  "name": "tag",
  "source": 0,
  "value": "34"
},
{
  "begin": 2076,
  "end": 2163,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2265,
  "end": 2271,
  "name": "DUP1",
  "source": 0
```

```
{
  "begin": 2226,
  "end": 2233,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2226,
  "end": 2246,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2234,
  "end": 2245,
  "name": "DUP5",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "PUSH",
  "source": 0,
```

},

```
},
{
  "begin": 2226,
  "end": 2246,
  "name": "AND",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2226,
  "end": 2246,
  "name": "AND",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "DUP2",
  "source": 0
},
```

```
{
  "begin": 2226,
  "end": 2246,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2226,
  "end": 2246,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "SWAP1",
  "source": 0
},
{
```

```
"begin": 2226,
  "end": 2246,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2226,
  "end": 2246,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2226,
  "end": 2246,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2226,
```

```
"end": 2246,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2226,
  "end": 2246,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 2226,
  "end": 2261,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2226,
  "end": 2261,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2226,
```

```
"end": 2261,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2226,
  "end": 2271,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
```

```
"name": "PUSH [tag]",
  "source": 0,
  "value": "37"
},
{
  "begin": 2226,
  "end": 2271,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "38"
},
{
  "begin": 2226,
  "end": 2271,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "tag",
  "source": 0,
  "value": "37"
},
{
  "begin": 2226,
  "end": 2271,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "SWAP3",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
```

```
"name": "POP",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "POP",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2226,
  "end": 2271,
  "name": "SSTORE",
  "source": 0
```

```
},
{
  "begin": 2226,
  "end": 2271,
  "name": "POP",
  "source": 0
},
{
  "begin": 2320,
  "end": 2326,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2281,
  "end": 2288,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2281,
  "end": 2301,
  "name": "DUP1",
  "source": 0
},
```

```
{
 "begin": 2289,
 "end": 2300,
 "name": "DUP5",
 "source": 0
},
{
 "begin": 2281,
 "end": 2301,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 2281,
 "end": 2301,
 "name": "AND",
 "source": 0
},
{
 "begin": 2281,
 "end": 2301,
 "name": "PUSH",
 "source": 0,
 },
```

```
{
  "begin": 2281,
  "end": 2301,
  "name": "AND",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
```

```
"begin": 2281,
  "end": 2301,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
```

```
"name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2281,
  "end": 2301,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2281,
  "end": 2301,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2281,
  "end": 2301,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 2281,
  "end": 2316,
```

```
"name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 2281,
  "end": 2316,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2281,
  "end": 2316,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2281,
  "end": 2326,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
```

```
"name": "DUP3",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "39"
},
{
  "begin": 2281,
  "end": 2326,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "SWAP1",
```

```
"source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "40"
},
{
  "begin": 2281,
  "end": 2326,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "tag",
  "source": 0,
  "value": "39"
},
{
  "begin": 2281,
  "end": 2326,
```

```
"name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "SWAP3",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "POP",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "POP",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "DUP2",
  "source": 0
```

```
},
{
  "begin": 2281,
  "end": 2326,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "SSTORE",
  "source": 0
},
{
  "begin": 2281,
  "end": 2326,
  "name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2380,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
```

```
{
  "begin": 2386,
  "end": 2426,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2386,
  "end": 2426,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "PUSH",
  "source": 0,
  "value": "60"
},
```

```
{
  "begin": 2386,
  "end": 2426,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2386,
  "end": 2426,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "DUP1",
  "source": 0
},
{
```

```
"begin": 2398,
  "end": 2409,
  "name": "DUP5",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2386,
  "end": 2426,
  "name": "AND",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2386,
```

```
"end": 2426,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2386,
  "end": 2426,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2411,
  "end": 2417,
  "name": "DUP4",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
```

```
"name": "DUP2",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2386,
  "end": 2426,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2419,
  "end": 2425,
  "name": "DUP4",
```

```
"source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2386,
  "end": 2426,
  "name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
```

```
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SLOAD",
  "source": 0
},
{
```

```
"begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SSTORE",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
```

```
"name": "DUP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
```

```
"value": "1"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SUB",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "0"
```

```
},
{
  "begin": 2368,
  "end": 2427,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "KECCAK256",
  "source": 0
```

```
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "3"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "MUL",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
```

```
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
```

```
"begin": 2368,
  "end": 2427,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
```

```
"name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP2",
```

```
"source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
```

```
"source": 0,
  "value": "100"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "EXP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP2",
  "source": 0
```

```
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2368,
  "end": 2427,
  "name": "MUL",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "NOT",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "AND",
  "source": 0
},
```

```
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP4",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2368,
  "end": 2427,
  "name": "AND",
  "source": 0
},
{
```

```
"begin": 2368,
  "end": 2427,
  "name": "MUL",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "OR",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SSTORE",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
```

```
"name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "MLOAD",
```

```
"source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SSTORE",
  "source": 0
```

```
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "MLOAD",
  "source": 0
},
```

```
{
  "begin": 2368,
  "end": 2427,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "PUSH",
  "source": 0,
  "value": "2"
},
{
  "begin": 2368,
  "end": 2427,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "SSTORE",
  "source": 0
},
{
```

```
"begin": 2368,
  "end": 2427,
  "name": "POP",
  "source": 0
},
{
  "begin": 2368,
  "end": 2427,
  "name": "POP",
  "source": 0
},
{
  "begin": 2460,
  "end": 2471,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2442,
```

```
"end": 2488,
                           "name": "AND",
                           "source": 0
                         },
                         {
                           "begin": 2442,
                           "end": 2488,
                           "name": "PUSH",
                           "source": 0,
                                                                                      "value":
"7772D368CD3CC6FA8DC9C0956D36DD1243D603ABC8D99496F89D0E6950D80DDE"
                         },
                         {
                            "begin": 2473,
                           "end": 2479,
                           "name": "DUP3",
                           "source": 0
                         },
                         {
                           "begin": 2481,
                           "end": 2487,
                           "name": "DUP4",
                           "source": 0
                         },
                         {
                           "begin": 2442,
```

```
"end": 2488,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2442,
  "end": 2488,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "42"
},
{
  "begin": 2442,
  "end": 2488,
  "name": "SWAP3",
  "source": 0
},
{
  "begin": 2442,
```

```
"end": 2488,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "23"
},
{
  "begin": 2442,
  "end": 2488,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2442,
```

```
"end": 2488,
  "name": "tag",
  "source": 0,
  "value": "42"
},
{
  "begin": 2442,
  "end": 2488,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2442,
  "end": 2488,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2442,
```

```
"end": 2488,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "SUB",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2442,
  "end": 2488,
  "name": "LOG2",
```

```
"source": 0
},
{
  "begin": 2547,
  "end": 2558,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2533,
  "end": 2633,
  "name": "AND",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "PUSH",
  "source": 0,
```

"E3E2E5B15DBD2776222DEAB4CBD7FB2AEEECFD735EED24E9809B2352F3FA2D37"

```
},
{
  "begin": 2560,
  "end": 2567,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2560,
  "end": 2580,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2568,
  "end": 2579,
  "name": "DUP6",
  "source": 0
},
{
  "begin": 2560,
  "end": 2580,
  "name": "PUSH",
```

```
"source": 0,
 },
{
 "begin": 2560,
 "end": 2580,
 "name": "AND",
 "source": 0
},
{
 "begin": 2560,
 "end": 2580,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 2560,
 "end": 2580,
 "name": "AND",
 "source": 0
},
{
 "begin": 2560,
 "end": 2580,
 "name": "DUP2",
```

```
"source": 0
},
{
  "begin": 2560,
  "end": 2580,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2560,
  "end": 2580,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2560,
  "end": 2580,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2560,
  "end": 2580,
  "name": "SWAP1",
  "source": 0
```

```
},
{
  "begin": 2560,
  "end": 2580,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2560,
  "end": 2580,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2560,
  "end": 2580,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2560,
  "end": 2580,
  "name": "ADD",
  "source": 0
},
```

```
{
  "begin": 2560,
  "end": 2580,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2560,
  "end": 2580,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 2560,
  "end": 2595,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2560,
  "end": 2595,
  "name": "ADD",
  "source": 0
},
```

```
{
  "begin": 2560,
  "end": 2595,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2597,
  "end": 2604,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2597,
  "end": 2617,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2605,
  "end": 2616,
  "name": "DUP7",
  "source": 0
},
{
```

```
"begin": 2597,
 "end": 2617,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 2597,
 "end": 2617,
 "name": "AND",
 "source": 0
},
{
 "begin": 2597,
 "end": 2617,
 "name": "PUSH",
 "source": 0,
 },
{
 "begin": 2597,
 "end": 2617,
 "name": "AND",
 "source": 0
},
{
```

```
"begin": 2597,
  "end": 2617,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2597,
  "end": 2617,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2597,
  "end": 2617,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2597,
  "end": 2617,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2597,
```

```
"end": 2617,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2597,
  "end": 2617,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2597,
  "end": 2617,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2597,
  "end": 2617,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2597,
  "end": 2617,
```

```
"name": "ADD",
  "source": 0
},
{
  "begin": 2597,
  "end": 2617,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2597,
  "end": 2617,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 2597,
  "end": 2632,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 2597,
  "end": 2632,
```

```
"name": "ADD",
  "source": 0
},
{
  "begin": 2597,
  "end": 2632,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2533,
  "end": 2633,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "PUSH [tag]",
```

```
"source": 0,
  "value": "43"
},
{
  "begin": 2533,
  "end": 2633,
  "name": "SWAP3",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "PUSH [tag]",
  "source": 0,
```

```
"value": "23"
},
{
  "begin": 2533,
  "end": 2633,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "tag",
  "source": 0,
  "value": "43"
},
{
  "begin": 2533,
  "end": 2633,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "PUSH",
```

```
"source": 0,
  "value": "40"
},
{
  "begin": 2533,
  "end": 2633,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "SUB",
  "source": 0
```

```
},
{
  "begin": 2533,
  "end": 2633,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2533,
  "end": 2633,
  "name": "LOG2",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "POP",
  "source": 0
},
{
  "begin": 1992,
  "end": 2640,
  "name": "POP",
  "source": 0
},
{
```

```
"begin": 1992,
  "end": 2640,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "tag",
  "source": 0,
  "value": "15"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
```

```
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 1082,
```

```
"end": 1115,
  "name": "LT",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "44"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "JUMPI",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1082,
```

```
"end": 1115,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "REVERT",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "tag",
  "source": 0,
  "value": "44"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "3"
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "MUL",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "POP",
```

```
"source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "POP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "0"
```

```
},
{
  "begin": 1082,
  "end": 1115,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SLOAD",
  "source": 0
},
```

```
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "100"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "EXP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
```

```
"begin": 1082,
  "end": 1115,
  "name": "DIV",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 1082,
  "end": 1115,
  "name": "AND",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
```

```
"end": 1115,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
```

```
"name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "PUSH",
  "source": 0,
  "value": "2"
},
{
  "begin": 1082,
  "end": 1115,
  "name": "ADD",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SLOAD",
```

```
"source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "POP",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "name": "DUP4",
  "source": 0
},
{
  "begin": 1082,
  "end": 1115,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 0
```

```
},
{
  "begin": 982,
  "end": 1023,
  "name": "tag",
  "source": 0,
  "value": "21"
},
{
  "begin": 982,
  "end": 1023,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
```

```
"value": "20"
},
{
  "begin": 982,
  "end": 1023,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 982,
  "end": 1023,
  "name": "MSTORE",
  "source": 0
```

```
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 982,
  "end": 1023,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
```

```
"value": "0"
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "POP",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "POP",
  "source": 0
},
```

```
{
  "begin": 982,
  "end": 1023,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 982,
  "end": 1023,
  "name": "ADD",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SLOAD",
  "source": 0
},
{
```

```
"begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 982,
  "end": 1023,
  "name": "ADD",
  "source": 0
},
{
  "begin": 982,
```

```
"end": 1023,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "POP",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 982,
  "end": 1023,
  "jumpType": "[out]",
```

```
"name": "JUMP",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "tag",
  "source": 0,
  "value": "25"
},
{
  "begin": 3116,
  "end": 3221,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 3169,
  "end": 3176,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 3195,
  "end": 3207,
```

```
"name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 3195,
  "end": 3214,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 3195,
  "end": 3214,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 3195,
  "end": 3214,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 3195,
  "end": 3214,
  "name": "POP",
```

```
"source": 0
},
{
  "begin": 3188,
  "end": 3214,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 3188,
  "end": 3214,
  "name": "POP",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 3116,
  "end": 3221,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 0
```

```
},
{
  "begin": 2845,
  "end": 2965,
  "name": "tag",
  "source": 0,
  "value": "30"
},
{
  "begin": 2845,
  "end": 2965,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2906,
  "end": 2919,
  "name": "PUSH [tag]",
  "source": 0,
  "value": "47"
},
{
  "begin": 2906,
  "end": 2919,
  "name": "PUSH [tag]",
  "source": 0,
```

```
"value": "48"
},
{
  "begin": 2906,
  "end": 2919,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": 2906,
  "end": 2919,
  "name": "tag",
  "source": 0,
  "value": "47"
},
{
  "begin": 2906,
  "end": 2919,
  "name": "JUMPDEST",
  "source": 0
},
{
  "begin": 2938,
  "end": 2945,
  "name": "PUSH",
```

```
"source": 0,
  "value": "0"
},
{
  "begin": 2938,
  "end": 2958,
  "name": "DUP1",
  "source": 0
},
{
  "begin": 2946,
  "end": 2957,
  "name": "DUP4",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2938,
  "end": 2958,
  "name": "AND",
```

```
"source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  },
{
  "begin": 2938,
  "end": 2958,
  "name": "AND",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "MSTORE",
  "source": 0
```

```
},
{
  "begin": 2938,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2938,
  "end": 2958,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "DUP2",
  "source": 0
},
```

```
{
  "begin": 2938,
  "end": 2958,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "20"
},
{
  "begin": 2938,
  "end": 2958,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2938,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
```

```
{
  "begin": 2938,
  "end": 2958,
  "name": "KECCAK256",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2931,
  "end": 2958,
  "name": "MLOAD",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "DUP1",
  "source": 0
},
{
```

```
"begin": 2931,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2931,
  "end": 2958,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "40"
},
{
  "begin": 2931,
  "end": 2958,
  "name": "MSTORE",
  "source": 0
},
{
```

```
"begin": 2931,
  "end": 2958,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "0"
},
{
  "begin": 2931,
  "end": 2958,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2931,
```

```
"end": 2958,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "PUSH",
```

```
"source": 0,
  "value": "20"
},
{
  "begin": 2931,
  "end": 2958,
  "name": "ADD",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "PUSH",
  "source": 0,
  "value": "1"
},
{
  "begin": 2931,
  "end": 2958,
  "name": "DUP3",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "ADD",
```

```
"source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "SLOAD",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "DUP2",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "MSTORE",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "POP",
  "source": 0
},
```

```
{
  "begin": 2931,
  "end": 2958,
  "name": "POP",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2931,
  "end": 2958,
  "name": "POP",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "SWAP2",
  "source": 0
},
{
  "begin": 2845,
```

```
"end": 2965,
  "name": "SWAP1",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "name": "POP",
  "source": 0
},
{
  "begin": 2845,
  "end": 2965,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 0
},
{
  "begin": -1,
  "end": -1,
  "name": "tag",
  "source": -1,
  "value": "48"
},
{
  "begin": -1,
```

```
"end": -1,
  "name": "JUMPDEST",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "PUSH",
  "source": -1,
  "value": "40"
},
{
  "begin": -1,
  "end": -1,
  "name": "MLOAD",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "DUP1",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
```

```
"name": "PUSH",
  "source": -1,
  "value": "40"
},
{
  "begin": -1,
  "end": -1,
  "name": "ADD",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "PUSH",
  "source": -1,
  "value": "40"
},
{
  "begin": -1,
  "end": -1,
  "name": "MSTORE",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
```

```
"name": "DUP1",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "PUSH",
  "source": -1,
  "value": "0"
},
{
  "begin": -1,
  "end": -1,
  "name": "DUP2",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "MSTORE",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "PUSH",
```

```
"source": -1,
  "value": "20"
},
{
  "begin": -1,
  "end": -1,
  "name": "ADD",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "PUSH",
  "source": -1,
  "value": "0"
},
{
  "begin": -1,
  "end": -1,
  "name": "DUP2",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "MSTORE",
```

```
"source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "POP",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "name": "SWAP1",
  "source": -1
},
{
  "begin": -1,
  "end": -1,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": -1
},
{
  "begin": 88,
  "end": 205,
  "name": "tag",
  "source": 1,
```

```
"value": "51"
},
{
  "begin": 88,
  "end": 205,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 197,
  "end": 198,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 194,
  "end": 195,
  "name": "DUP1",
  "source": 1
},
{
  "begin": 187,
  "end": 199,
  "name": "REVERT",
  "source": 1
```

```
},
{
  "begin": 334,
  "end": 460,
  "name": "tag",
  "source": 1,
  "value": "53"
},
{
  "begin": 334,
  "end": 460,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 371,
  "end": 378,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 411,
  "end": 453,
  "name": "PUSH",
  "source": 1,
```

```
},
{
  "begin": 404,
  "end": 409,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 400,
  "end": 454,
  "name": "AND",
  "source": 1
},
{
  "begin": 389,
  "end": 454,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 389,
  "end": 454,
  "name": "POP",
  "source": 1
```

},

```
{
  "begin": 334,
  "end": 460,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 334,
  "end": 460,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 334,
  "end": 460,
  "name": "POP",
  "source": 1
},
{
  "begin": 334,
  "end": 460,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
```

```
"begin": 466,
  "end": 562,
  "name": "tag",
  "source": 1,
  "value": "54"
},
{
  "begin": 466,
  "end": 562,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 503,
  "end": 510,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 532,
  "end": 556,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "74"
},
```

```
{
  "begin": 550,
  "end": 555,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 532,
  "end": 556,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "53"
},
{
  "begin": 532,
  "end": 556,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 532,
  "end": 556,
  "name": "tag",
  "source": 1,
  "value": "74"
```

```
},
{
  "begin": 532,
  "end": 556,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 521,
  "end": 556,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 521,
  "end": 556,
  "name": "POP",
  "source": 1
},
{
  "begin": 466,
  "end": 562,
  "name": "SWAP2",
  "source": 1
},
{
```

```
"begin": 466,
  "end": 562,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 466,
  "end": 562,
  "name": "POP",
  "source": 1
},
{
  "begin": 466,
  "end": 562,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 568,
  "end": 690,
  "name": "tag",
  "source": 1,
  "value": "55"
},
{
```

```
"begin": 568,
  "end": 690,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 641,
  "end": 665,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "76"
},
{
  "begin": 659,
  "end": 664,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 641,
  "end": 665,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "54"
},
{
```

```
"begin": 641,
  "end": 665,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 641,
  "end": 665,
  "name": "tag",
  "source": 1,
  "value": "76"
},
{
  "begin": 641,
  "end": 665,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 634,
  "end": 639,
  "name": "DUP2",
  "source": 1
},
{
```

```
"begin": 631,
  "end": 666,
  "name": "EQ",
  "source": 1
},
{
  "begin": 621,
  "end": 684,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "77"
},
{
  "begin": 621,
  "end": 684,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 680,
  "end": 681,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
```

```
"begin": 677,
  "end": 678,
  "name": "DUP1",
  "source": 1
},
{
  "begin": 670,
  "end": 682,
  "name": "REVERT",
  "source": 1
},
{
  "begin": 621,
  "end": 684,
  "name": "tag",
  "source": 1,
  "value": "77"
},
{
  "begin": 621,
  "end": 684,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 568,
```

```
"end": 690,
  "name": "POP",
  "source": 1
},
{
  "begin": 568,
  "end": 690,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 696,
  "end": 835,
  "name": "tag",
  "source": 1,
  "value": "56"
},
{
  "begin": 696,
  "end": 835,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 742,
```

```
"end": 747,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 780,
  "end": 786,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 767,
  "end": 787,
  "name": "CALLDATALOAD",
  "source": 1
},
{
  "begin": 758,
  "end": 787,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 758,
  "end": 787,
```

```
"name": "POP",
  "source": 1
},
{
  "begin": 796,
  "end": 829,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "79"
},
{
  "begin": 823,
  "end": 828,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 796,
  "end": 829,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "55"
},
{
  "begin": 796,
  "end": 829,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 796,
  "end": 829,
  "name": "tag",
  "source": 1,
  "value": "79"
},
{
  "begin": 796,
  "end": 829,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 696,
  "end": 835,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 696,
  "end": 835,
```

```
"name": "SWAP2",
  "source": 1
},
{
  "begin": 696,
  "end": 835,
  "name": "POP",
  "source": 1
},
{
  "begin": 696,
  "end": 835,
  "name": "POP",
  "source": 1
},
{
  "begin": 696,
  "end": 835,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 841,
  "end": 918,
  "name": "tag",
```

```
"source": 1,
  "value": "57"
},
{
  "begin": 841,
  "end": 918,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 878,
  "end": 885,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 907,
  "end": 912,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 896,
  "end": 912,
  "name": "SWAP1",
```

```
"source": 1
},
{
  "begin": 896,
  "end": 912,
  "name": "POP",
  "source": 1
},
{
  "begin": 841,
  "end": 918,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 841,
  "end": 918,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 841,
  "end": 918,
  "name": "POP",
  "source": 1
},
```

```
{
  "begin": 841,
  "end": 918,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 924,
  "end": 1046,
  "name": "tag",
  "source": 1,
  "value": "58"
},
{
  "begin": 924,
  "end": 1046,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 997,
  "end": 1021,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "82"
```

```
},
{
  "begin": 1015,
  "end": 1020,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 997,
  "end": 1021,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 997,
  "end": 1021,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 997,
  "end": 1021,
  "name": "tag",
  "source": 1,
```

```
"value": "82"
},
{
  "begin": 997,
  "end": 1021,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 990,
  "end": 995,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 987,
  "end": 1022,
  "name": "EQ",
  "source": 1
},
{
  "begin": 977,
  "end": 1040,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "83"
```

```
},
{
  "begin": 977,
  "end": 1040,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 1036,
  "end": 1037,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 1033,
  "end": 1034,
  "name": "DUP1",
  "source": 1
},
{
  "begin": 1026,
  "end": 1038,
  "name": "REVERT",
  "source": 1
},
```

```
{
  "begin": 977,
  "end": 1040,
  "name": "tag",
  "source": 1,
  "value": "83"
},
{
  "begin": 977,
  "end": 1040,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 924,
  "end": 1046,
  "name": "POP",
  "source": 1
},
{
  "begin": 924,
  "end": 1046,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
```

```
{
  "begin": 1052,
  "end": 1191,
  "name": "tag",
  "source": 1,
  "value": "59"
},
{
  "begin": 1052,
  "end": 1191,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1098,
  "end": 1103,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 1136,
  "end": 1142,
  "name": "DUP2",
  "source": 1
},
```

```
{
  "begin": 1123,
  "end": 1143,
  "name": "CALLDATALOAD",
  "source": 1
},
{
  "begin": 1114,
  "end": 1143,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 1114,
  "end": 1143,
  "name": "POP",
  "source": 1
},
{
  "begin": 1152,
  "end": 1185,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "85"
},
{
```

```
"begin": 1179,
  "end": 1184,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 1152,
  "end": 1185,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "58"
},
{
  "begin": 1152,
  "end": 1185,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1152,
  "end": 1185,
  "name": "tag",
  "source": 1,
  "value": "85"
},
```

```
{
  "begin": 1152,
  "end": 1185,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1052,
  "end": 1191,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 1052,
  "end": 1191,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 1052,
  "end": 1191,
  "name": "POP",
  "source": 1
},
{
  "begin": 1052,
```

```
"end": 1191,
  "name": "POP",
  "source": 1
},
{
  "begin": 1052,
  "end": 1191,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1197,
  "end": 1671,
  "name": "tag",
  "source": 1,
  "value": "10"
},
{
  "begin": 1197,
  "end": 1671,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1265,
```

```
"end": 1271,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 1273,
  "end": 1279,
  "name": "DUP1",
  "source": 1
},
{
  "begin": 1322,
  "end": 1324,
  "name": "PUSH",
  "source": 1,
  "value": "40"
},
{
  "begin": 1310,
  "end": 1319,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 1301,
```

```
"end": 1308,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 1297,
  "end": 1320,
  "name": "SUB",
  "source": 1
},
{
  "begin": 1293,
  "end": 1325,
  "name": "SLT",
  "source": 1
},
{
  "begin": 1290,
  "end": 1409,
  "name": "ISZERO",
  "source": 1
},
{
  "begin": 1290,
  "end": 1409,
  "name": "PUSH [tag]",
```

```
"source": 1,
  "value": "87"
},
{
  "begin": 1290,
  "end": 1409,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 1328,
  "end": 1407,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "88"
},
{
  "begin": 1328,
  "end": 1407,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "51"
},
{
  "begin": 1328,
  "end": 1407,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1328,
  "end": 1407,
  "name": "tag",
  "source": 1,
  "value": "88"
},
{
  "begin": 1328,
  "end": 1407,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1290,
  "end": 1409,
  "name": "tag",
  "source": 1,
  "value": "87"
},
{
  "begin": 1290,
```

```
"end": 1409,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1448,
  "end": 1449,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 1473,
  "end": 1526,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "89"
},
{
  "begin": 1518,
  "end": 1525,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 1509,
```

```
"end": 1515,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 1498,
  "end": 1507,
  "name": "DUP7",
  "source": 1
},
{
  "begin": 1494,
  "end": 1516,
  "name": "ADD",
  "source": 1
},
{
  "begin": 1473,
  "end": 1526,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "56"
},
{
  "begin": 1473,
  "end": 1526,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1473,
  "end": 1526,
  "name": "tag",
  "source": 1,
  "value": "89"
},
{
  "begin": 1473,
  "end": 1526,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1463,
  "end": 1526,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 1463,
  "end": 1526,
```

```
"name": "POP",
  "source": 1
},
{
  "begin": 1419,
  "end": 1536,
  "name": "POP",
  "source": 1
},
{
  "begin": 1575,
  "end": 1577,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 1601,
  "end": 1654,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "90"
},
{
  "begin": 1646,
  "end": 1653,
```

```
"name": "DUP6",
  "source": 1
},
{
  "begin": 1637,
  "end": 1643,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 1626,
  "end": 1635,
  "name": "DUP7",
  "source": 1
},
{
  "begin": 1622,
  "end": 1644,
  "name": "ADD",
  "source": 1
},
{
  "begin": 1601,
  "end": 1654,
  "name": "PUSH [tag]",
  "source": 1,
```

```
"value": "59"
},
{
  "begin": 1601,
  "end": 1654,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1601,
  "end": 1654,
  "name": "tag",
  "source": 1,
  "value": "90"
},
{
  "begin": 1601,
  "end": 1654,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1591,
  "end": 1654,
  "name": "SWAP2",
```

```
"source": 1
},
{
  "begin": 1591,
  "end": 1654,
  "name": "POP",
  "source": 1
},
{
  "begin": 1546,
  "end": 1664,
  "name": "POP",
  "source": 1
},
{
  "begin": 1197,
  "end": 1671,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 1197,
  "end": 1671,
  "name": "POP",
  "source": 1
},
```

```
{
  "begin": 1197,
  "end": 1671,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 1197,
  "end": 1671,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 1197,
  "end": 1671,
  "name": "POP",
  "source": 1
},
{
  "begin": 1197,
  "end": 1671,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
```

```
"begin": 1677,
  "end": 2006,
  "name": "tag",
  "source": 1,
  "value": "14"
},
{
  "begin": 1677,
  "end": 2006,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1736,
  "end": 1742,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 1785,
  "end": 1787,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
```

```
{
  "begin": 1773,
  "end": 1782,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 1764,
  "end": 1771,
  "name": "DUP5",
  "source": 1
},
{
  "begin": 1760,
  "end": 1783,
  "name": "SUB",
  "source": 1
},
{
  "begin": 1756,
  "end": 1788,
  "name": "SLT",
  "source": 1
},
{
  "begin": 1753,
```

```
"end": 1872,
  "name": "ISZERO",
  "source": 1
},
{
  "begin": 1753,
  "end": 1872,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "92"
},
{
  "begin": 1753,
  "end": 1872,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 1791,
  "end": 1870,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "93"
},
{
  "begin": 1791,
```

```
"end": 1870,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "51"
},
{
  "begin": 1791,
  "end": 1870,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1791,
  "end": 1870,
  "name": "tag",
  "source": 1,
  "value": "93"
},
{
  "begin": 1791,
  "end": 1870,
  "name": "JUMPDEST",
  "source": 1
},
{
```

```
"begin": 1753,
  "end": 1872,
  "name": "tag",
  "source": 1,
  "value": "92"
},
{
  "begin": 1753,
  "end": 1872,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 1911,
  "end": 1912,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 1936,
  "end": 1989,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "94"
},
```

```
{
  "begin": 1981,
  "end": 1988,
  "name": "DUP5",
  "source": 1
},
{
  "begin": 1972,
  "end": 1978,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 1961,
  "end": 1970,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 1957,
  "end": 1979,
  "name": "ADD",
  "source": 1
},
{
  "begin": 1936,
```

```
"end": 1989,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "59"
},
{
  "begin": 1936,
  "end": 1989,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 1936,
  "end": 1989,
  "name": "tag",
  "source": 1,
  "value": "94"
},
{
  "begin": 1936,
  "end": 1989,
  "name": "JUMPDEST",
  "source": 1
},
{
```

```
"begin": 1926,
  "end": 1989,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 1926,
  "end": 1989,
  "name": "POP",
  "source": 1
},
{
  "begin": 1882,
  "end": 1999,
  "name": "POP",
  "source": 1
},
{
  "begin": 1677,
  "end": 2006,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 1677,
  "end": 2006,
```

```
"name": "SWAP2",
  "source": 1
},
{
  "begin": 1677,
  "end": 2006,
  "name": "POP",
  "source": 1
},
{
  "begin": 1677,
  "end": 2006,
  "name": "POP",
  "source": 1
},
{
  "begin": 1677,
  "end": 2006,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2012,
  "end": 2130,
  "name": "tag",
```

```
"source": 1,
  "value": "60"
},
{
  "begin": 2012,
  "end": 2130,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2099,
  "end": 2123,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "96"
},
{
  "begin": 2117,
  "end": 2122,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 2099,
  "end": 2123,
  "name": "PUSH [tag]",
```

```
"source": 1,
  "value": "54"
},
{
  "begin": 2099,
  "end": 2123,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2099,
  "end": 2123,
  "name": "tag",
  "source": 1,
  "value": "96"
},
{
  "begin": 2099,
  "end": 2123,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2094,
  "end": 2097,
```

```
"name": "DUP3",
  "source": 1
},
{
  "begin": 2087,
  "end": 2124,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 2012,
  "end": 2130,
  "name": "POP",
  "source": 1
},
{
  "begin": 2012,
  "end": 2130,
  "name": "POP",
  "source": 1
},
{
  "begin": 2012,
  "end": 2130,
  "jumpType": "[out]",
  "name": "JUMP",
```

```
"source": 1
},
{
  "begin": 2136,
  "end": 2254,
  "name": "tag",
  "source": 1,
  "value": "61"
},
{
  "begin": 2136,
  "end": 2254,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2223,
  "end": 2247,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "98"
},
{
  "begin": 2241,
  "end": 2246,
  "name": "DUP2",
```

```
"source": 1
},
{
  "begin": 2223,
  "end": 2247,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 2223,
  "end": 2247,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2223,
  "end": 2247,
  "name": "tag",
  "source": 1,
  "value": "98"
},
{
  "begin": 2223,
  "end": 2247,
```

```
"name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2218,
  "end": 2221,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 2211,
  "end": 2248,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 2136,
  "end": 2254,
  "name": "POP",
  "source": 1
},
{
  "begin": 2136,
  "end": 2254,
  "name": "POP",
  "source": 1
```

```
},
{
  "begin": 2136,
  "end": 2254,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "name": "tag",
  "source": 1,
  "value": "17"
},
{
  "begin": 2260,
  "end": 2702,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2409,
  "end": 2413,
  "name": "PUSH",
  "source": 1,
```

```
"value": "0"
},
{
  "begin": 2447,
  "end": 2449,
  "name": "PUSH",
  "source": 1,
  "value": "60"
},
{
  "begin": 2436,
  "end": 2445,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 2432,
  "end": 2450,
  "name": "ADD",
  "source": 1
},
{
  "begin": 2424,
  "end": 2450,
  "name": "SWAP1",
  "source": 1
```

```
},
{
  "begin": 2424,
  "end": 2450,
  "name": "POP",
  "source": 1
},
{
  "begin": 2460,
  "end": 2531,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "100"
},
{
  "begin": 2528,
  "end": 2529,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 2517,
  "end": 2526,
  "name": "DUP4",
  "source": 1
```

```
},
{
  "begin": 2513,
  "end": 2530,
  "name": "ADD",
  "source": 1
},
{
  "begin": 2504,
  "end": 2510,
  "name": "DUP7",
  "source": 1
},
{
  "begin": 2460,
  "end": 2531,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "60"
},
{
  "begin": 2460,
  "end": 2531,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
```

```
},
{
  "begin": 2460,
  "end": 2531,
  "name": "tag",
  "source": 1,
  "value": "100"
},
{
  "begin": 2460,
  "end": 2531,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2541,
  "end": 2613,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "101"
},
{
  "begin": 2609,
  "end": 2611,
  "name": "PUSH",
  "source": 1,
```

```
"value": "20"
},
{
  "begin": 2598,
  "end": 2607,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 2594,
  "end": 2612,
  "name": "ADD",
  "source": 1
},
{
  "begin": 2585,
  "end": 2591,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 2541,
  "end": 2613,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "61"
```

```
},
{
  "begin": 2541,
  "end": 2613,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2541,
  "end": 2613,
  "name": "tag",
  "source": 1,
  "value": "101"
},
{
  "begin": 2541,
  "end": 2613,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2623,
  "end": 2695,
  "name": "PUSH [tag]",
  "source": 1,
```

```
"value": "102"
},
{
  "begin": 2691,
  "end": 2693,
  "name": "PUSH",
  "source": 1,
  "value": "40"
},
{
  "begin": 2680,
  "end": 2689,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 2676,
  "end": 2694,
  "name": "ADD",
  "source": 1
},
{
  "begin": 2667,
  "end": 2673,
  "name": "DUP5",
  "source": 1
```

```
},
{
  "begin": 2623,
  "end": 2695,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "61"
},
{
  "begin": 2623,
  "end": 2695,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2623,
  "end": 2695,
  "name": "tag",
  "source": 1,
  "value": "102"
},
{
  "begin": 2623,
  "end": 2695,
  "name": "JUMPDEST",
```

```
"source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "name": "SWAP5",
  "source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "name": "SWAP4",
  "source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "name": "POP",
  "source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "name": "POP",
  "source": 1
},
```

```
{
  "begin": 2260,
  "end": 2702,
  "name": "POP",
  "source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "name": "POP",
  "source": 1
},
{
  "begin": 2260,
  "end": 2702,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2708,
  "end": 3037,
  "name": "tag",
  "source": 1,
  "value": "20"
},
```

```
{
  "begin": 2708,
  "end": 3037,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2767,
  "end": 2773,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 2816,
  "end": 2818,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 2804,
  "end": 2813,
  "name": "DUP3",
  "source": 1
},
```

```
{
  "begin": 2795,
  "end": 2802,
  "name": "DUP5",
  "source": 1
},
{
  "begin": 2791,
  "end": 2814,
  "name": "SUB",
  "source": 1
},
{
  "begin": 2787,
  "end": 2819,
  "name": "SLT",
  "source": 1
},
{
  "begin": 2784,
  "end": 2903,
  "name": "ISZERO",
  "source": 1
},
{
  "begin": 2784,
```

```
"end": 2903,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "104"
},
{
  "begin": 2784,
  "end": 2903,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 2822,
  "end": 2901,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "105"
},
{
  "begin": 2822,
  "end": 2901,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "51"
},
{
```

```
"begin": 2822,
  "end": 2901,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2822,
  "end": 2901,
  "name": "tag",
  "source": 1,
  "value": "105"
},
{
  "begin": 2822,
  "end": 2901,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2784,
  "end": 2903,
  "name": "tag",
  "source": 1,
  "value": "104"
},
```

```
{
  "begin": 2784,
  "end": 2903,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2942,
  "end": 2943,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 2967,
  "end": 3020,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "106"
},
{
  "begin": 3012,
  "end": 3019,
  "name": "DUP5",
  "source": 1
},
```

```
{
  "begin": 3003,
  "end": 3009,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 2992,
  "end": 3001,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 2988,
  "end": 3010,
  "name": "ADD",
  "source": 1
},
{
  "begin": 2967,
  "end": 3020,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "56"
},
{
```

```
"begin": 2967,
  "end": 3020,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 2967,
  "end": 3020,
  "name": "tag",
  "source": 1,
  "value": "106"
},
{
  "begin": 2967,
  "end": 3020,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 2957,
  "end": 3020,
  "name": "SWAP2",
  "source": 1
},
{
```

```
"begin": 2957,
  "end": 3020,
  "name": "POP",
  "source": 1
},
{
  "begin": 2913,
  "end": 3030,
  "name": "POP",
  "source": 1
},
{
  "begin": 2708,
  "end": 3037,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 2708,
  "end": 3037,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 2708,
  "end": 3037,
```

```
"name": "POP",
  "source": 1
},
{
  "begin": 2708,
  "end": 3037,
  "name": "POP",
  "source": 1
},
{
  "begin": 2708,
  "end": 3037,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3043,
  "end": 3375,
  "name": "tag",
  "source": 1,
  "value": "23"
},
{
  "begin": 3043,
  "end": 3375,
```

```
"name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3164,
  "end": 3168,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 3202,
  "end": 3204,
  "name": "PUSH",
  "source": 1,
  "value": "40"
},
{
  "begin": 3191,
  "end": 3200,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 3187,
  "end": 3205,
```

```
"name": "ADD",
  "source": 1
},
{
  "begin": 3179,
  "end": 3205,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 3179,
  "end": 3205,
  "name": "POP",
  "source": 1
},
{
  "begin": 3215,
  "end": 3286,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "108"
},
{
  "begin": 3283,
  "end": 3284,
  "name": "PUSH",
```

```
"source": 1,
  "value": "0"
},
{
  "begin": 3272,
  "end": 3281,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 3268,
  "end": 3285,
  "name": "ADD",
  "source": 1
},
{
  "begin": 3259,
  "end": 3265,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 3215,
  "end": 3286,
  "name": "PUSH [tag]",
  "source": 1,
```

```
"value": "61"
},
{
  "begin": 3215,
  "end": 3286,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3215,
  "end": 3286,
  "name": "tag",
  "source": 1,
  "value": "108"
},
{
  "begin": 3215,
  "end": 3286,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3296,
  "end": 3368,
  "name": "PUSH [tag]",
```

```
"source": 1,
  "value": "109"
},
{
  "begin": 3364,
  "end": 3366,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 3353,
  "end": 3362,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 3349,
  "end": 3367,
  "name": "ADD",
  "source": 1
},
{
  "begin": 3340,
  "end": 3346,
  "name": "DUP5",
```

```
"source": 1
},
{
  "begin": 3296,
  "end": 3368,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "61"
},
{
  "begin": 3296,
  "end": 3368,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3296,
  "end": 3368,
  "name": "tag",
  "source": 1,
  "value": "109"
},
{
  "begin": 3296,
  "end": 3368,
```

```
"name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3043,
  "end": 3375,
  "name": "SWAP4",
  "source": 1
},
{
  "begin": 3043,
  "end": 3375,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 3043,
  "end": 3375,
  "name": "POP",
  "source": 1
},
{
  "begin": 3043,
  "end": 3375,
  "name": "POP",
  "source": 1
```

```
},
{
  "begin": 3043,
  "end": 3375,
  "name": "POP",
  "source": 1
},
{
  "begin": 3043,
  "end": 3375,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3381,
  "end": 3603,
  "name": "tag",
  "source": 1,
  "value": "27"
},
{
  "begin": 3381,
  "end": 3603,
  "name": "JUMPDEST",
  "source": 1
```

```
},
{
  "begin": 3474,
  "end": 3478,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 3512,
  "end": 3514,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 3501,
  "end": 3510,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 3497,
  "end": 3515,
  "name": "ADD",
  "source": 1
```

```
},
{
  "begin": 3489,
  "end": 3515,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 3489,
  "end": 3515,
  "name": "POP",
  "source": 1
},
{
  "begin": 3525,
  "end": 3596,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "111"
},
{
  "begin": 3593,
  "end": 3594,
  "name": "PUSH",
  "source": 1,
  "value": "0"
```

```
},
{
  "begin": 3582,
  "end": 3591,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 3578,
  "end": 3595,
  "name": "ADD",
  "source": 1
},
{
  "begin": 3569,
  "end": 3575,
  "name": "DUP5",
  "source": 1
},
{
  "begin": 3525,
  "end": 3596,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "61"
},
```

```
{
  "begin": 3525,
  "end": 3596,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3525,
  "end": 3596,
  "name": "tag",
  "source": 1,
  "value": "111"
},
{
  "begin": 3525,
  "end": 3596,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3381,
  "end": 3603,
  "name": "SWAP3",
  "source": 1
},
```

```
{
  "begin": 3381,
  "end": 3603,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 3381,
  "end": 3603,
  "name": "POP",
  "source": 1
},
{
  "begin": 3381,
  "end": 3603,
  "name": "POP",
  "source": 1
},
{
  "begin": 3381,
  "end": 3603,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
```

```
"begin": 3609,
  "end": 3717,
  "name": "tag",
  "source": 1,
  "value": "62"
},
{
  "begin": 3609,
  "end": 3717,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3686,
  "end": 3710,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "113"
},
{
  "begin": 3704,
  "end": 3709,
  "name": "DUP2",
  "source": 1
},
{
```

```
"begin": 3686,
  "end": 3710,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 3686,
  "end": 3710,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3686,
  "end": 3710,
  "name": "tag",
  "source": 1,
  "value": "113"
},
{
  "begin": 3686,
  "end": 3710,
  "name": "JUMPDEST",
  "source": 1
},
```

```
{
  "begin": 3681,
  "end": 3684,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 3674,
  "end": 3711,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 3609,
  "end": 3717,
  "name": "POP",
  "source": 1
},
{
  "begin": 3609,
  "end": 3717,
  "name": "POP",
  "source": 1
},
{
  "begin": 3609,
```

```
"end": 3717,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 3807,
  "end": 4326,
  "name": "tag",
  "source": 1,
  "value": "63"
},
{
  "begin": 3807,
  "end": 4326,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3946,
  "end": 3950,
  "name": "PUSH",
  "source": 1,
  "value": "40"
},
{
```

```
"begin": 3941,
  "end": 3944,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 3937,
  "end": 3951,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4043,
  "end": 4047,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 4036,
  "end": 4041,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 4032,
```

```
"end": 4048,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4026,
  "end": 4049,
  "name": "MLOAD",
  "source": 1
},
{
  "begin": 4062,
  "end": 4125,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "115"
},
{
  "begin": 4119,
  "end": 4123,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 4114,
```

```
"end": 4117,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 4110,
  "end": 4124,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4096,
  "end": 4108,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 4062,
  "end": 4125,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "62"
},
{
  "begin": 4062,
  "end": 4125,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 4062,
  "end": 4125,
  "name": "tag",
  "source": 1,
  "value": "115"
},
{
  "begin": 4062,
  "end": 4125,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 3961,
  "end": 4135,
  "name": "POP",
  "source": 1
},
{
  "begin": 4227,
  "end": 4231,
```

```
"name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 4220,
  "end": 4225,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 4216,
  "end": 4232,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4210,
  "end": 4233,
  "name": "MLOAD",
  "source": 1
},
{
  "begin": 4246,
  "end": 4309,
  "name": "PUSH [tag]",
```

```
"source": 1,
  "value": "116"
},
{
  "begin": 4303,
  "end": 4307,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 4298,
  "end": 4301,
  "name": "DUP6",
  "source": 1
},
{
  "begin": 4294,
  "end": 4308,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4280,
  "end": 4292,
  "name": "DUP3",
```

```
"source": 1
},
{
  "begin": 4246,
  "end": 4309,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "62"
},
{
  "begin": 4246,
  "end": 4309,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 4246,
  "end": 4309,
  "name": "tag",
  "source": 1,
  "value": "116"
},
{
  "begin": 4246,
  "end": 4309,
```

```
"name": "JUMPDEST",
  "source": 1
},
{
  "begin": 4145,
  "end": 4319,
  "name": "POP",
  "source": 1
},
{
  "begin": 3915,
  "end": 4326,
  "name": "POP",
  "source": 1
},
{
  "begin": 3807,
  "end": 4326,
  "name": "POP",
  "source": 1
},
{
  "begin": 3807,
  "end": 4326,
  "name": "POP",
  "source": 1
```

```
},
{
  "begin": 3807,
  "end": 4326,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 4332,
  "end": 4638,
  "name": "tag",
  "source": 1,
  "value": "32"
},
{
  "begin": 4332,
  "end": 4638,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 4467,
  "end": 4471,
  "name": "PUSH",
  "source": 1,
```

```
"value": "0"
},
{
  "begin": 4505,
  "end": 4507,
  "name": "PUSH",
  "source": 1,
  "value": "40"
},
{
  "begin": 4494,
  "end": 4503,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 4490,
  "end": 4508,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4482,
  "end": 4508,
  "name": "SWAP1",
  "source": 1
```

```
},
{
  "begin": 4482,
  "end": 4508,
  "name": "POP",
  "source": 1
},
{
  "begin": 4518,
  "end": 4631,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "118"
},
{
  "begin": 4628,
  "end": 4629,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 4617,
  "end": 4626,
  "name": "DUP4",
  "source": 1
```

```
},
{
  "begin": 4613,
  "end": 4630,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4604,
  "end": 4610,
  "name": "DUP5",
  "source": 1
},
{
  "begin": 4518,
  "end": 4631,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "63"
},
{
  "begin": 4518,
  "end": 4631,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
```

```
},
{
  "begin": 4518,
  "end": 4631,
  "name": "tag",
  "source": 1,
  "value": "118"
},
{
  "begin": 4518,
  "end": 4631,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 4332,
  "end": 4638,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 4332,
  "end": 4638,
  "name": "SWAP2",
  "source": 1
},
```

```
{
  "begin": 4332,
  "end": 4638,
  "name": "POP",
  "source": 1
},
{
  "begin": 4332,
  "end": 4638,
  "name": "POP",
  "source": 1
},
{
  "begin": 4332,
  "end": 4638,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 4644,
  "end": 4813,
  "name": "tag",
  "source": 1,
  "value": "64"
},
```

```
{
  "begin": 4644,
  "end": 4813,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 4728,
  "end": 4739,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 4762,
  "end": 4768,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 4757,
  "end": 4760,
  "name": "DUP3",
  "source": 1
},
{
```

```
"begin": 4750,
  "end": 4769,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 4802,
  "end": 4806,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 4797,
  "end": 4800,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 4793,
  "end": 4807,
  "name": "ADD",
  "source": 1
},
{
  "begin": 4778,
```

```
"end": 4807,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 4778,
  "end": 4807,
  "name": "POP",
  "source": 1
},
{
  "begin": 4644,
  "end": 4813,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 4644,
  "end": 4813,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 4644,
  "end": 4813,
  "name": "POP",
```

```
"source": 1
},
{
  "begin": 4644,
  "end": 4813,
  "name": "POP",
  "source": 1
},
{
  "begin": 4644,
  "end": 4813,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 4819,
  "end": 4998,
  "name": "tag",
  "source": 1,
  "value": "65"
},
{
  "begin": 4819,
  "end": 4998,
  "name": "JUMPDEST",
```

```
"source": 1
                          },
                          {
                            "begin": 4959,
                            "end": 4990,
                            "name": "PUSH",
                            "source": 1,
                                                                                        "value":
"496E73756666696369656E74206D61696E6E65742062616C616E63652E000000"
                          },
                          {
                            "begin": 4955,
                            "end": 4956,
                            "name": "PUSH",
                            "source": 1,
                            "value": "0"
                          },
                          {
                            "begin": 4947,
                            "end": 4953,
                            "name": "DUP3",
                            "source": 1
                          },
                          {
                            "begin": 4943,
                            "end": 4957,
```

```
"name": "ADD",
  "source": 1
},
{
  "begin": 4936,
  "end": 4991,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 4819,
  "end": 4998,
  "name": "POP",
  "source": 1
},
{
  "begin": 4819,
  "end": 4998,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 5004,
  "end": 5370,
  "name": "tag",
```

```
"source": 1,
  "value": "66"
},
{
  "begin": 5004,
  "end": 5370,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 5146,
  "end": 5149,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 5167,
  "end": 5234,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "122"
},
{
  "begin": 5231,
  "end": 5233,
```

```
"name": "PUSH",
  "source": 1,
  "value": "1D"
},
{
  "begin": 5226,
  "end": 5229,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 5167,
  "end": 5234,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "64"
},
{
  "begin": 5167,
  "end": 5234,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 5167,
```

```
"end": 5234,
  "name": "tag",
  "source": 1,
  "value": "122"
},
{
  "begin": 5167,
  "end": 5234,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 5160,
  "end": 5234,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 5160,
  "end": 5234,
  "name": "POP",
  "source": 1
},
{
  "begin": 5243,
  "end": 5336,
```

```
"name": "PUSH [tag]",
  "source": 1,
  "value": "123"
},
{
  "begin": 5332,
  "end": 5335,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 5243,
  "end": 5336,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "65"
},
{
  "begin": 5243,
  "end": 5336,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 5243,
```

```
"end": 5336,
  "name": "tag",
  "source": 1,
  "value": "123"
},
{
  "begin": 5243,
  "end": 5336,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 5361,
  "end": 5363,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 5356,
  "end": 5359,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 5352,
```

```
"end": 5364,
  "name": "ADD",
  "source": 1
},
{
  "begin": 5345,
  "end": 5364,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 5345,
  "end": 5364,
  "name": "POP",
  "source": 1
},
{
  "begin": 5004,
  "end": 5370,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 5004,
  "end": 5370,
  "name": "SWAP1",
```

```
"source": 1
},
{
  "begin": 5004,
  "end": 5370,
  "name": "POP",
  "source": 1
},
{
  "begin": 5004,
  "end": 5370,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 5376,
  "end": 5795,
  "name": "tag",
  "source": 1,
  "value": "36"
},
{
  "begin": 5376,
  "end": 5795,
  "name": "JUMPDEST",
```

```
"source": 1
},
{
  "begin": 5542,
  "end": 5546,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 5580,
  "end": 5582,
  "name": "PUSH",
  "source": 1,
  "value": "20"
},
{
  "begin": 5569,
  "end": 5578,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 5565,
  "end": 5583,
  "name": "ADD",
```

```
"source": 1
},
{
  "begin": 5557,
  "end": 5583,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 5557,
  "end": 5583,
  "name": "POP",
  "source": 1
},
{
  "begin": 5629,
  "end": 5638,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 5623,
  "end": 5627,
  "name": "DUP2",
  "source": 1
},
```

```
{
  "begin": 5619,
  "end": 5639,
  "name": "SUB",
  "source": 1
},
{
  "begin": 5615,
  "end": 5616,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 5604,
  "end": 5613,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 5600,
  "end": 5617,
  "name": "ADD",
  "source": 1
},
{
```

```
"begin": 5593,
  "end": 5640,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 5657,
  "end": 5788,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "125"
},
{
  "begin": 5783,
  "end": 5787,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 5657,
  "end": 5788,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "66"
},
{
```

```
"begin": 5657,
  "end": 5788,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 5657,
  "end": 5788,
  "name": "tag",
  "source": 1,
  "value": "125"
},
{
  "begin": 5657,
  "end": 5788,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 5649,
  "end": 5788,
  "name": "SWAP1",
  "source": 1
},
{
```

```
"begin": 5649,
  "end": 5788,
  "name": "POP",
  "source": 1
},
{
  "begin": 5376,
  "end": 5795,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 5376,
  "end": 5795,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 5376,
  "end": 5795,
  "name": "POP",
  "source": 1
},
{
  "begin": 5376,
  "end": 5795,
```

```
"name": "JUMP",
                      "source": 1
                    },
                    {
                      "begin": 5801,
                      "end": 5981,
                      "name": "tag",
                      "source": 1,
                      "value": "67"
                    },
                    {
                      "begin": 5801,
                      "end": 5981,
                      "name": "JUMPDEST",
                      "source": 1
                    },
                    {
                      "begin": 5849,
                      "end": 5926,
                      "name": "PUSH",
                      "source": 1,
                                                                     "value":
},
                    {
```

"jumpType": "[out]",

```
"begin": 5846,
  "end": 5847,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 5839,
  "end": 5927,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 5946,
  "end": 5950,
  "name": "PUSH",
  "source": 1,
  "value": "11"
},
{
  "begin": 5943,
  "end": 5944,
  "name": "PUSH",
  "source": 1,
  "value": "4"
},
```

```
{
  "begin": 5936,
  "end": 5951,
  "name": "MSTORE",
  "source": 1
},
{
  "begin": 5970,
  "end": 5974,
  "name": "PUSH",
  "source": 1,
  "value": "24"
},
{
  "begin": 5967,
  "end": 5968,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 5960,
  "end": 5975,
  "name": "REVERT",
  "source": 1
},
```

```
{
  "begin": 5987,
  "end": 6181,
  "name": "tag",
  "source": 1,
  "value": "38"
},
{
  "begin": 5987,
  "end": 6181,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6027,
  "end": 6031,
  "name": "PUSH",
  "source": 1,
  "value": "0"
},
{
  "begin": 6047,
  "end": 6067,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "128"
```

```
},
{
  "begin": 6065,
  "end": 6066,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 6047,
  "end": 6067,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 6047,
  "end": 6067,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6047,
  "end": 6067,
  "name": "tag",
  "source": 1,
```

```
"value": "128"
},
{
  "begin": 6047,
  "end": 6067,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6042,
  "end": 6067,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 6042,
  "end": 6067,
  "name": "POP",
  "source": 1
},
{
  "begin": 6081,
  "end": 6101,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "129"
```

```
},
{
  "begin": 6099,
  "end": 6100,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 6081,
  "end": 6101,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 6081,
  "end": 6101,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6081,
  "end": 6101,
  "name": "tag",
  "source": 1,
```

```
"value": "129"
},
{
  "begin": 6081,
  "end": 6101,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6076,
  "end": 6101,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 6076,
  "end": 6101,
  "name": "POP",
  "source": 1
},
{
  "begin": 6125,
  "end": 6126,
  "name": "DUP3",
  "source": 1
},
```

```
{
  "begin": 6122,
  "end": 6123,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 6118,
  "end": 6127,
  "name": "SUB",
  "source": 1
},
{
  "begin": 6110,
  "end": 6127,
  "name": "SWAP1",
  "source": 1
},
{
  "begin": 6110,
  "end": 6127,
  "name": "POP",
  "source": 1
},
{
  "begin": 6149,
```

```
"end": 6150,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 6143,
  "end": 6147,
  "name": "DUP2",
  "source": 1
},
{
  "begin": 6140,
  "end": 6151,
  "name": "GT",
  "source": 1
},
{
  "begin": 6137,
  "end": 6174,
  "name": "ISZERO",
  "source": 1
},
{
  "begin": 6137,
  "end": 6174,
  "name": "PUSH [tag]",
```

```
"source": 1,
  "value": "130"
},
{
  "begin": 6137,
  "end": 6174,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 6154,
  "end": 6172,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "131"
},
{
  "begin": 6154,
  "end": 6172,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "67"
},
{
  "begin": 6154,
  "end": 6172,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6154,
  "end": 6172,
  "name": "tag",
  "source": 1,
  "value": "131"
},
{
  "begin": 6154,
  "end": 6172,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6137,
  "end": 6174,
  "name": "tag",
  "source": 1,
  "value": "130"
},
{
  "begin": 6137,
```

```
"end": 6174,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 5987,
  "end": 6181,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 5987,
  "end": 6181,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 5987,
  "end": 6181,
  "name": "POP",
  "source": 1
},
{
  "begin": 5987,
  "end": 6181,
  "name": "POP",
```

```
"source": 1
},
{
  "begin": 5987,
  "end": 6181,
  "jumpType": "[out]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6187,
  "end": 6378,
  "name": "tag",
  "source": 1,
  "value": "40"
},
{
  "begin": 6187,
  "end": 6378,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6227,
  "end": 6230,
  "name": "PUSH",
```

```
"source": 1,
  "value": "0"
},
{
  "begin": 6246,
  "end": 6266,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "133"
},
{
  "begin": 6264,
  "end": 6265,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 6246,
  "end": 6266,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 6246,
  "end": 6266,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6246,
  "end": 6266,
  "name": "tag",
  "source": 1,
  "value": "133"
},
{
  "begin": 6246,
  "end": 6266,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6241,
  "end": 6266,
  "name": "SWAP2",
  "source": 1
},
{
  "begin": 6241,
  "end": 6266,
```

```
"name": "POP",
  "source": 1
},
{
  "begin": 6280,
  "end": 6300,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "134"
},
{
  "begin": 6298,
  "end": 6299,
  "name": "DUP4",
  "source": 1
},
{
  "begin": 6280,
  "end": 6300,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "57"
},
{
  "begin": 6280,
  "end": 6300,
```

```
"jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6280,
  "end": 6300,
  "name": "tag",
  "source": 1,
  "value": "134"
},
{
  "begin": 6280,
  "end": 6300,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6275,
  "end": 6300,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 6275,
  "end": 6300,
```

```
"name": "POP",
  "source": 1
},
{
  "begin": 6323,
  "end": 6324,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 6320,
  "end": 6321,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 6316,
  "end": 6325,
  "name": "ADD",
  "source": 1
},
{
  "begin": 6309,
  "end": 6325,
  "name": "SWAP1",
  "source": 1
```

```
},
{
  "begin": 6309,
  "end": 6325,
  "name": "POP",
  "source": 1
},
{
  "begin": 6344,
  "end": 6347,
  "name": "DUP1",
  "source": 1
},
{
  "begin": 6341,
  "end": 6342,
  "name": "DUP3",
  "source": 1
},
{
  "begin": 6338,
  "end": 6348,
  "name": "GT",
  "source": 1
},
{
```

```
"begin": 6335,
  "end": 6371,
  "name": "ISZERO",
  "source": 1
},
{
  "begin": 6335,
  "end": 6371,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "135"
},
{
  "begin": 6335,
  "end": 6371,
  "name": "JUMPI",
  "source": 1
},
{
  "begin": 6351,
  "end": 6369,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "136"
},
{
```

```
"begin": 6351,
  "end": 6369,
  "name": "PUSH [tag]",
  "source": 1,
  "value": "67"
},
{
  "begin": 6351,
  "end": 6369,
  "jumpType": "[in]",
  "name": "JUMP",
  "source": 1
},
{
  "begin": 6351,
  "end": 6369,
  "name": "tag",
  "source": 1,
  "value": "136"
},
{
  "begin": 6351,
  "end": 6369,
  "name": "JUMPDEST",
  "source": 1
},
```

```
{
  "begin": 6335,
  "end": 6371,
  "name": "tag",
  "source": 1,
  "value": "135"
},
{
  "begin": 6335,
  "end": 6371,
  "name": "JUMPDEST",
  "source": 1
},
{
  "begin": 6187,
  "end": 6378,
  "name": "SWAP3",
  "source": 1
},
{
  "begin": 6187,
  "end": 6378,
  "name": "SWAP2",
  "source": 1
},
{
```

```
"begin": 6187,
             "end": 6378,
             "name": "POP",
             "source": 1
          },
          {
             "begin": 6187,
             "end": 6378,
             "name": "POP",
             "source": 1
          },
          {
             "begin": 6187,
             "end": 6378,
             "jumpType": "[out]",
             "name": "JUMP",
             "source": 1
          }
       ]
     }
  },
  "sourceList": [
     "Mainnet2testnet.sol",
     "#utility.yul"
  ]
},
```

```
"methodIdentifiers": {
    "getLedger(address)": "f7cd6af9",
    "getTotalTransactions()": "b5c604ff",
    "ledgers(address)": "b1e1c370",
    "performTransaction(address,uint256)": "67844d2b",
    "transactions(uint256)": "9ace38c2"
  }
},
```

"metadata":

"{\"compiler\":{\"version\":\"0.8.25+commit.b61c2a91\"},\"language\":\"Solidity\",\"output\":{\"abi\":[{\"in puts\":[],\"stateMutability\":\"nonpayable\",\"type\":\"constructor\"},{\"anonymous\":false,\"inputs\":[{\"in dexed\":true,\"internalType\":\"address\",\"name\":\"participant\",\"type\":\"address\"},{\"indexed\":false ,\"internalType\":\"uint256\",\"name\":\"newMainnetBalance\",\"type\":\"uint256\"},{\"indexed\":false,\"i nternalType\":\"uint256\",\"name\":\"newTestnetBalance\",\"type\":\"uint256\"}],\"name\":\"LedgerUpd ated\",\"type\":\"event\"},{\"anonymous\":false,\"inputs\":[{\"indexed\":true,\"internalType\":\"address\",\ "name\":\"participant\",\"type\":\"address\"},{\"indexed\":false,\"internalType\":\"uint256\",\"name\":\"m ainnetAmount\",\"type\":\"uint256\"},{\"indexed\":false,\"internalType\":\"uint256\",\"name\":\"testnetA mount\",\"type\":\"uint256\"}],\"name\":\"TransactionLogged\",\"type\":\"event\"},{\"inputs\":[{\"internalT ype\":\"address\",\"name\":\"participant\",\"type\":\"address\"}],\"name\":\"getLedger\",\"outputs\":[{\"co mponents\":[{\"internalType\":\"uint256\",\"name\":\"mainnetBalance\",\"type\":\"uint256\"},{\"internalT ype\":\"uint256\",\"name\":\"testnetBalance\",\"type\":\"uint256\"}],\"internalType\":\"struct LiminalFinancialSystem.Ledger\",\"name\":\"\",\"type\":\"tuple\"}],\"stateMutability\":\"view\",\"type\":\"f unction\"},{\"inputs\":[],\"name\":\"getTotalTransactions\",\"outputs\":[{\"internalType\":\"uint256\",\"na \":\"address\",\"name\":\"\",\"type\":\"address\"}],\"name\":\"ledgers\",\"outputs\":[{\"internalType\":\"uint 256\",\"name\":\"mainnetBalance\",\"type\":\"uint256\"},{\"internalType\":\"uint256\",\"name\":\"testnet

Balance\",\"type\":\"uint256\"}],\"stateMutability\":\"view\",\"type\":\"function\"},{\"inputs\":[{\"internalTy pe\":\"address\",\"name\":\"participant\",\"type\":\"address\"},{\"internalType\":\"uint256\",\"name\":\"a mount\",\"type\":\"uint256\"}],\"name\":\"performTransaction\",\"outputs\":[],\"stateMutability\":\"nonpay able\",\"type\":\"function\"},{\"inputs\":[{\"internalType\":\"uint256\",\"name\":\"\",\"type\":\"uint256\"}],\"n ame\":\"transactions\",\"outputs\":[{\"internalType\":\"address\",\"name\":\"participant\",\"type\":\"addre ss\"},{\"internalType\":\"uint256\",\"name\":\"mainnetAmount\",\"type\":\"uint256\"},{\"internalType\":\"u "int256\",\"name\":\"testnetAmount\",\"type\":\"uint256\"}],\"stateMutability\":\"view\",\"type\":\"function\" }],\"devdoc\":{\"author\":\"James Ocallaghan\",\"details\":\"The system showcases credit/debit balance management across mainnet and testnet ledgers. Visit ENS: citibankdemobusiness.dev for details.\",\"kind\":\"dev\",\"methods\":{\"constructor\":{\"details\":\"Initialize with а transaction\"},\"getLedger(address)\":{\"details\":\"Getter function participant's for а ledger balances.\",\"params\":{\"participant\":\"The address of the participant.\"},\"returns\":{\"_0\":\"Ledger memory The ledger of the participant.\"}},\"getTotalTransactions()\":{\"details\":\"Getter function for transactions (for demonstration).\",\"returns\":{\" 0\":\"uint256 total The total number of transactions.\"}},\"performTransaction(address,uint256)\":{\"details\":\"Perform a transaction, debiting the mainnet balance and crediting the testnet balance.\",\"params\":{\"amount\":\"The amount to between ledgers.\",\"participant\":\"The address of the participant performing transfer transaction.\"}}},\"title\":\"Liminal **Financial Transaction** System\",\"version\":1},\"userdoc\":{\"kind\":\"user\",\"methods\":{},\"notice\":\"This contract demonstrates dual-ledger transaction system for Citibank Demo **Business** Inc.\",\"version\":1}},\"settings\":{\"compilationTarget\":{\"Mainnet2testnet.sol\":\"LiminalFinancialSyst em\"},\"evmVersion\":\"cancun\",\"libraries\":{},\"metadata\":{\"bytecodeHash\":\"ipfs\"},\"optimizer\":{\" enabled\":false,\"runs\":200},\"remappings\":[]},\"sources\":{\"Mainnet2testnet.sol\":{\"keccak256\":\"0 x2207e8ba1e0d45373fb350d5b7ca0a1463460ee4cd2e597964591d629c69770e\",\"license\":\"MIT\" "urls\":[\"bzz-raw://c28d29e92769f56201ee0ba954d41e5f47a6d94751438a65be312d6cf8ad0023\", \"dweb:/ipfs/QmTLRchQdn8RnmWHS37wJub3eq1P6ANrPA96P8LP3CzpfJ\"]}},\"version\":1}",

```
"storageLayout": {
  "storage": [
     {
       "astId": 19,
       "contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
       "label": "ledgers",
       "offset": 0,
       "slot": "0",
       "type": "t_mapping(t_address,t_struct(Ledger)7_storage)"
     },
     {
       "astId": 23,
       "contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
       "label": "transactions",
       "offset": 0,
       "slot": "1",
       "type": "t_array(t_struct(Transaction)14_storage)dyn_storage"
     }
  ],
  "types": {
     "t_address": {
       "encoding": "inplace",
       "label": "address",
       "numberOfBytes": "20"
     },
     "t_array(t_struct(Transaction)14_storage)dyn_storage": {
```

```
"base": "t_struct(Transaction)14_storage",
  "encoding": "dynamic_array",
  "label": "struct LiminalFinancialSystem.Transaction[]",
  "numberOfBytes": "32"
},
"t_mapping(t_address,t_struct(Ledger)7_storage)": {
  "encoding": "mapping",
  "key": "t_address",
  "label": "mapping(address => struct LiminalFinancialSystem.Ledger)",
  "numberOfBytes": "32",
  "value": "t_struct(Ledger)7_storage"
},
"t_struct(Ledger)7_storage": {
  "encoding": "inplace",
  "label": "struct LiminalFinancialSystem.Ledger",
  "members": [
     {
       "astld": 4,
       "contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
        "label": "mainnetBalance",
       "offset": 0,
       "slot": "0",
       "type": "t_uint256"
     },
     {
        "astId": 6,
```

```
"contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
        "label": "testnetBalance",
        "offset": 0,
        "slot": "1",
        "type": "t_uint256"
     }
  ],
  "numberOfBytes": "64"
},
"t_struct(Transaction)14_storage": {
  "encoding": "inplace",
  "label": "struct LiminalFinancialSystem.Transaction",
  "members": [
     {
        "astId": 9,
        "contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
        "label": "participant",
        "offset": 0,
        "slot": "0",
        "type": "t_address"
     },
     {
        "astId": 11,
        "contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
        "label": "mainnetAmount",
        "offset": 0,
```

```
"type": "t_uint256"
                         },
                          {
                            "astld": 13,
                            "contract": "Mainnet2testnet.sol:LiminalFinancialSystem",
                            "label": "testnetAmount",
                            "offset": 0,
                            "slot": "2",
                            "type": "t_uint256"
                         }
                       ],
                       "numberOfBytes": "96"
                    },
                    "t_uint256": {
                       "encoding": "inplace",
                       "label": "uint256",
                       "numberOfBytes": "32"
                    }
                  }
               },
               "userdoc": {
                  "kind": "user",
                  "methods": {},
                  "notice": "This contract demonstrates a dual-ledger transaction system for Citibank
Demo Business Inc.",
```

"slot": "1",

```
"version": 1
       }
     }
  }
},
"sources": {
  "Mainnet2testnet.sol": {
     "ast": {
        "absolutePath": "Mainnet2testnet.sol",
        "exportedSymbols": {
          "LiminalFinancialSystem": [
             146
          ]
        },
        "id": 147,
        "license": "MIT",
        "nodeType": "SourceUnit",
        "nodes": [
          {
             "id": 1,
             "literals": [
                "solidity",
                "^",
                "0.8",
                ".0"
             ],
```

```
"nodeType": "PragmaDirective",

"src": "32:23:0"

},

{

"abstract": false,

"baseContracts": [],

"canonicalName": "LiminalFinancialSystem",

"contractDependencies": [],

"contractKind": "contract",

"documentation": {

"id": 2,

"nodeType": "StructuredDocumentation",

"src": "57:334:0",

"text": " @title Liminal Financial Tra
```

"text": " @title Liminal Financial Transaction System\n @author James
Ocallaghan\n @notice This contract demonstrates a dual-ledger transaction system for Citibank
Demo Business Inc.\n @dev The system showcases credit/debit balance management across
mainnet and testnet ledgers.\n Visit ENS: citibankdemobusiness.dev for details."

```
},
"fullyImplemented": true,
"id": 146,
"linearizedBaseContracts": [
    146
],
"name": "LiminalFinancialSystem",
"nameLocation": "402:22:0",
"nodeType": "ContractDefinition",
```

```
"nodes": [
  {
     "canonicalName": "LiminalFinancialSystem.Ledger",
     "id": 7,
     "members": [
       {
          "constant": false,
          "id": 4,
          "mutability": "mutable",
          "name": "mainnetBalance",
          "nameLocation": "516:14:0",
          "nodeType": "VariableDeclaration",
          "scope": 7,
          "src": "508:22:0",
          "stateVariable": false,
          "storageLocation": "default",
          "typeDescriptions": {
            "typeIdentifier": "t_uint256",
            "typeString": "uint256"
          },
          "typeName": {
             "id": 3,
             "name": "uint256",
             "nodeType": "ElementaryTypeName",
             "src": "508:7:0",
             "typeDescriptions": {
```

```
"typeIdentifier": "t_uint256",
        "typeString": "uint256"
     }
  },
  "visibility": "internal"
},
{
  "constant": false,
  "id": 6,
  "mutability": "mutable",
  "name": "testnetBalance",
  "nameLocation": "614:14:0",
  "nodeType": "VariableDeclaration",
  "scope": 7,
  "src": "606:22:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  },
  "typeName": {
     "id": 5,
     "name": "uint256",
     "nodeType": "ElementaryTypeName",
     "src": "606:7:0",
```

```
"typeDescriptions": {
             "typeIdentifier": "t_uint256",
             "typeString": "uint256"
          }
        },
        "visibility": "internal"
     }
  ],
  "name": "Ledger",
  "nameLocation": "491:6:0",
  "nodeType": "StructDefinition",
  "scope": 146,
  "src": "484:216:0",
  "visibility": "public"
},
{
  "canonicalName": "LiminalFinancialSystem.Transaction",
  "id": 14,
  "members": [
     {
        "constant": false,
        "id": 9,
        "mutability": "mutable",
        "name": "participant",
        "nameLocation": "775:11:0",
        "nodeType": "VariableDeclaration",
```

```
"scope": 14,
  "src": "767:19:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_address",
     "typeString": "address"
  },
  "typeName": {
     "id": 8,
     "name": "address",
     "nodeType": "ElementaryTypeName",
     "src": "767:7:0",
     "stateMutability": "nonpayable",
     "typeDescriptions": {
       "typeIdentifier": "t_address",
       "typeString": "address"
     }
  },
  "visibility": "internal"
},
  "constant": false,
  "id": 11,
  "mutability": "mutable",
  "name": "mainnetAmount",
```

{

```
"nameLocation": "804:13:0",
"nodeType": "VariableDeclaration",
"scope": 14,
"src": "796:21:0",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"typeName": {
  "id": 10,
  "name": "uint256",
  "nodeType": "ElementaryTypeName",
  "src": "796:7:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
},
"visibility": "internal"
"constant": false,
"id": 13,
"mutability": "mutable",
```

},

{

```
"name": "testnetAmount",
     "nameLocation": "870:13:0",
     "nodeType": "VariableDeclaration",
     "scope": 14,
     "src": "862:21:0",
     "stateVariable": false,
     "storageLocation": "default",
     "typeDescriptions": {
       "typeIdentifier": "t_uint256",
       "typeString": "uint256"
     },
     "typeName": {
       "id": 12,
       "name": "uint256",
       "nodeType": "ElementaryTypeName",
       "src": "862:7:0",
       "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
       }
     },
     "visibility": "internal"
  }
"name": "Transaction",
"nameLocation": "745:11:0",
```

],

```
"scope": 146,
                         "src": "738:186:0",
                         "visibility": "public"
                       },
                       {
                         "constant": false,
                         "functionSelector": "b1e1c370",
                         "id": 19,
                         "mutability": "mutable",
                         "name": "ledgers",
                         "nameLocation": "1016:7:0",
                          "nodeType": "VariableDeclaration",
                          "scope": 146,
                          "src": "982:41:0",
                         "stateVariable": true,
                          "storageLocation": "default",
                         "typeDescriptions": {
                                                                                       "typeldentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                           "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger)"
                         },
                         "typeName": {
                            "id": 18,
                            "keyName": "",
```

"nodeType": "StructDefinition",

```
"keyType": {
                              "id": 15,
                              "name": "address",
                              "nodeType": "ElementaryTypeName",
                              "src": "990:7:0",
                              "typeDescriptions": {
                                "typeIdentifier": "t_address",
                                "typeString": "address"
                              }
                           },
                           "nodeType": "Mapping",
                           "src": "982:26:0",
                           "typeDescriptions": {
                                                                                     "typeldentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                         "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger)"
                           },
                           "valueName": "",
                           "valueNameLocation": "-1:-1:-1",
                           "valueType": {
                              "id": 17,
                              "nodeType": "UserDefinedTypeName",
                              "pathNode": {
                                "id": 16,
```

"keyNameLocation": "-1:-1:-1",

```
"name": "Ledger",
          "nameLocations": [
             "1001:6:0"
          ],
          "nodeType": "IdentifierPath",
          "referencedDeclaration": 7,
          "src": "1001:6:0"
       },
       "referencedDeclaration": 7,
       "src": "1001:6:0",
        "typeDescriptions": {
          "typeIdentifier": "t_struct$_Ledger_$7_storage_ptr",
          "typeString": "struct LiminalFinancialSystem.Ledger"
       }
     }
  },
  "visibility": "public"
},
{
  "constant": false,
  "functionSelector": "9ace38c2",
   "id": 23,
  "mutability": "mutable",
   "name": "transactions",
  "nameLocation": "1103:12:0",
  "nodeType": "VariableDeclaration",
```

```
"scope": 146,
                         "src": "1082:33:0",
                         "stateVariable": true,
                         "storageLocation": "default",
                         "typeDescriptions": {
                                                                                       "typeIdentifier":
"t_array$_t_struct$_Transaction_$14_storage_$dyn_storage",
                            "typeString": "struct LiminalFinancialSystem.Transaction[]"
                         },
                         "typeName": {
                            "baseType": {
                              "id": 21,
                              "nodeType": "UserDefinedTypeName",
                              "pathNode": {
                                 "id": 20,
                                 "name": "Transaction",
                                 "nameLocations": [
                                    "1082:11:0"
                                 ],
                                 "nodeType": "IdentifierPath",
                                 "referencedDeclaration": 14,
                                 "src": "1082:11:0"
                              },
                              "referencedDeclaration": 14,
                              "src": "1082:11:0",
                              "typeDescriptions": {
```

```
"typeString": "struct LiminalFinancialSystem.Transaction"
                             }
                           },
                           "id": 22,
                           "nodeType": "ArrayTypeName",
                           "src": "1082:13:0",
                           "typeDescriptions": {
                                                                                     "typeldentifier":
"t_array$_t_struct$_Transaction_$14_storage_$dyn_storage_ptr",
                              "typeString": "struct LiminalFinancialSystem.Transaction[]"
                           }
                        },
                         "visibility": "public"
                      },
                      {
                         "anonymous": false,
                                                                                    "eventSelector":
"7772d368cd3cc6fa8dc9c0956d36dd1243d603abc8d99496f89d0e6950d80dde",
                         "id": 31,
                         "name": "TransactionLogged",
                         "nameLocation": "1191:17:0",
                         "nodeType": "EventDefinition",
                         "parameters": {
                           "id": 30,
                           "nodeType": "ParameterList",
```

"typeIdentifier": "t_struct\$_Transaction_\$14_storage_ptr",

```
"parameters": [
  {
     "constant": false,
     "id": 25,
     "indexed": true,
     "mutability": "mutable",
     "name": "participant",
     "nameLocation": "1225:11:0",
     "nodeType": "VariableDeclaration",
     "scope": 31,
     "src": "1209:27:0",
     "stateVariable": false,
     "storageLocation": "default",
     "typeDescriptions": {
       "typeIdentifier": "t_address",
       "typeString": "address"
     },
     "typeName": {
       "id": 24,
       "name": "address",
       "nodeType": "ElementaryTypeName",
       "src": "1209:7:0",
       "stateMutability": "nonpayable",
        "typeDescriptions": {
          "typeIdentifier": "t_address",
          "typeString": "address"
```

```
}
  },
  "visibility": "internal"
},
{
  "constant": false,
  "id": 27,
  "indexed": false,
  "mutability": "mutable",
  "name": "mainnetAmount",
  "nameLocation": "1246:13:0",
  "nodeType": "VariableDeclaration",
  "scope": 31,
  "src": "1238:21:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  },
  "typeName": {
     "id": 26,
     "name": "uint256",
     "nodeType": "ElementaryTypeName",
     "src": "1238:7:0",
     "typeDescriptions": {
```

```
"typeIdentifier": "t_uint256",
       "typeString": "uint256"
     }
  },
  "visibility": "internal"
},
{
  "constant": false,
  "id": 29,
  "indexed": false,
  "mutability": "mutable",
  "name": "testnetAmount",
  "nameLocation": "1269:13:0",
  "nodeType": "VariableDeclaration",
  "scope": 31,
  "src": "1261:21:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  },
  "typeName": {
     "id": 28,
     "name": "uint256",
     "nodeType": "ElementaryTypeName",
```

```
"src": "1261:7:0",
                                   "typeDescriptions": {
                                      "typeIdentifier": "t_uint256",
                                      "typeString": "uint256"
                                   }
                                },
                                 "visibility": "internal"
                              }
                           ],
                           "src": "1208:75:0"
                         },
                         "src": "1185:99:0"
                      },
                      {
                         "anonymous": false,
                                                                                     "eventSelector":
"e3e2e5b15dbd2776222deab4cbd7fb2aeeecfd735eed24e9809b2352f3fa2d37",
                         "id": 39,
                         "name": "LedgerUpdated",
                         "nameLocation": "1295:13:0",
                         "nodeType": "EventDefinition",
                         "parameters": {
                           "id": 38,
                           "nodeType": "ParameterList",
                           "parameters": [
                              {
```

```
"constant": false,
"id": 33,
"indexed": true,
"mutability": "mutable",
"name": "participant",
"nameLocation": "1325:11:0",
"nodeType": "VariableDeclaration",
"scope": 39,
"src": "1309:27:0",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
},
"typeName": {
  "id": 32,
  "name": "address",
  "nodeType": "ElementaryTypeName",
  "src": "1309:7:0",
  "stateMutability": "nonpayable",
  "typeDescriptions": {
     "typeIdentifier": "t_address",
     "typeString": "address"
  }
},
```

```
"visibility": "internal"
},
{
  "constant": false,
  "id": 35,
  "indexed": false,
  "mutability": "mutable",
  "name": "newMainnetBalance",
  "nameLocation": "1346:17:0",
  "nodeType": "VariableDeclaration",
  "scope": 39,
  "src": "1338:25:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  },
  "typeName": {
     "id": 34,
     "name": "uint256",
     "nodeType": "ElementaryTypeName",
     "src": "1338:7:0",
     "typeDescriptions": {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
```

```
}
  },
  "visibility": "internal"
},
{
  "constant": false,
  "id": 37,
  "indexed": false,
  "mutability": "mutable",
  "name": "newTestnetBalance",
  "nameLocation": "1373:17:0",
  "nodeType": "VariableDeclaration",
  "scope": 39,
  "src": "1365:25:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  },
  "typeName": {
     "id": 36,
     "name": "uint256",
     "nodeType": "ElementaryTypeName",
     "src": "1365:7:0",
     "typeDescriptions": {
```

```
"typeIdentifier": "t_uint256",
                "typeString": "uint256"
             }
          },
          "visibility": "internal"
        }
     ],
     "src": "1308:83:0"
  },
  "src": "1289:103:0"
},
{
  "body": {
     "id": 59,
     "nodeType": "Block",
     "src": "1470:255:0",
     "statements": [
        {
          "expression": {
             "id": 49,
             "isConstant": false,
             "isLValue": false,
             "isPure": false,
             "IValueRequested": false,
             "leftHandSide": {
                "expression": {
```

```
"baseExpression": {
                                           "id": 43,
                                           "name": "ledgers",
                                           "nodeType": "Identifier",
                                           "overloadedDeclarations": [],
                                           "referencedDeclaration": 19,
                                           "src": "1571:7:0",
                                           "typeDescriptions": {
                                                                                       "typeldentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                            "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                           }
                                         },
                                         "id": 46,
                                         "indexExpression": {
                                           "expression": {
                                              "id": 44,
                                              "name": "msg",
                                              "nodeType": "Identifier",
                                              "overloadedDeclarations": [],
                                              "referencedDeclaration": 4294967281,
                                              "src": "1579:3:0",
                                              "typeDescriptions": {
                                                "typeIdentifier": "t_magic_message",
                                                "typeString": "msg"
```

```
}
  },
  "id": 45,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "IValueRequested": false,
  "memberLocation": "1583:6:0",
  "memberName": "sender",
  "nodeType": "MemberAccess",
  "src": "1579:10:0",
  "typeDescriptions": {
     "typeIdentifier": "t_address",
     "typeString": "address"
  }
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": false,
"nodeType": "IndexAccess",
"src": "1571:19:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Ledger_$7_storage",
        "typeString": "struct LiminalFinancialSystem.Ledger
```

```
}
  },
  "id": 47,
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": true,
  "memberLocation": "1591:14:0",
  "memberName": "mainnetBalance",
  "nodeType": "MemberAccess",
  "referencedDeclaration": 4,
  "src": "1571:34:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "hexValue": "31303030",
  "id": 48,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
  "kind": "number",
```

```
"IValueRequested": false,
        "nodeType": "Literal",
        "src": "1608:4:0",
        "typeDescriptions": {
          "typeIdentifier": "t_rational_1000_by_1",
          "typeString": "int_const 1000"
       },
        "value": "1000"
     },
     "src": "1571:41:0",
     "typeDescriptions": {
        "typeIdentifier": "t_uint256",
       "typeString": "uint256"
     }
  },
  "id": 50,
  "nodeType": "ExpressionStatement",
  "src": "1571:41:0"
},
{
  "expression": {
     "id": 57,
     "isConstant": false,
     "isLValue": false,
     "isPure": false,
     "IValueRequested": false,
```

```
"leftHandSide": {
                                      "expression": {
                                         "baseExpression": {
                                           "id": 51,
                                           "name": "ledgers",
                                           "nodeType": "Identifier",
                                           "overloadedDeclarations": [],
                                           "referencedDeclaration": 19,
                                           "src": "1650:7:0",
                                           "typeDescriptions": {
                                                                                       "typeldentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                            "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                           }
                                        },
                                         "id": 54,
                                         "indexExpression": {
                                           "expression": {
                                              "id": 52,
                                              "name": "msg",
                                              "nodeType": "Identifier",
                                              "overloadedDeclarations": [],
                                              "referencedDeclaration": 4294967281,
                                              "src": "1658:3:0",
                                              "typeDescriptions": {
```

```
"typeIdentifier": "t_magic_message",
       "typeString": "msg"
    }
  },
  "id": 53,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "IValueRequested": false,
  "memberLocation": "1662:6:0",
  "memberName": "sender",
  "nodeType": "MemberAccess",
  "src": "1658:10:0",
  "typeDescriptions": {
     "typeIdentifier": "t_address",
     "typeString": "address"
  }
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": false,
"nodeType": "IndexAccess",
"src": "1650:19:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Ledger_$7_storage",
```

```
}
  },
  "id": 55,
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": true,
  "memberLocation": "1670:14:0",
  "memberName": "testnetBalance",
  "nodeType": "MemberAccess",
  "referencedDeclaration": 6,
  "src": "1650:34:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "hexValue": "353030",
  "id": 56,
  "isConstant": false,
  "isLValue": false,
```

```
"isPure": true,
            "kind": "number",
            "IValueRequested": false,
             "nodeType": "Literal",
             "src": "1687:3:0",
             "typeDescriptions": {
               "typeIdentifier": "t_rational_500_by_1",
               "typeString": "int_const 500"
            },
            "value": "500"
          },
          "src": "1650:40:0",
          "typeDescriptions": {
             "typeIdentifier": "t_uint256",
             "typeString": "uint256"
          }
       },
       "id": 58,
       "nodeType": "ExpressionStatement",
       "src": "1650:40:0"
     }
  ]
},
"documentation": {
  "id": 40,
  "nodeType": "StructuredDocumentation",
```

```
"src": "1398:53:0",
  "text": " @dev Initialize with a transaction"
},
"id": 60,
"implemented": true,
"kind": "constructor",
"modifiers": [],
"name": "",
"nameLocation": "-1:-1:-1",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 41,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "1467:2:0"
},
"returnParameters": {
  "id": 42,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "1470:0:0"
},
"scope": 146,
"src": "1456:269:0",
"stateMutability": "nonpayable",
"virtual": false,
```

```
"visibility": "public"
},
{
  "body": {
     "id": 120,
     "nodeType": "Block",
     "src": "2066:574:0",
     "statements": [
        {
          "expression": {
             "arguments": [
               {
                  "commonType": {
                     "typeIdentifier": "t_uint256",
                     "typeString": "uint256"
                  },
                  "id": 74,
                  "isConstant": false,
                  "isLValue": false,
                  "isPure": false,
                  "IValueRequested": false,
                  "leftExpression": {
                     "expression": {
                        "baseExpression": {
                          "id": 69,
                          "name": "ledgers",
```

```
"nodeType": "Identifier",
                                                 "overloadedDeclarations": [],
                                                 "referencedDeclaration": 19,
                                                 "src": "2084:7:0",
                                                 "typeDescriptions": {
                                                                                        "typeldentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                             "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                                 }
                                              },
                                               "id": 71,
                                               "indexExpression": {
                                                 "id": 70,
                                                 "name": "participant",
                                                 "nodeType": "Identifier",
                                                 "overloadedDeclarations": [],
                                                 "referencedDeclaration": 63,
                                                 "src": "2092:11:0",
                                                 "typeDescriptions": {
                                                    "typeIdentifier": "t_address",
                                                    "typeString": "address"
                                                 }
                                              },
                                               "isConstant": false,
                                              "isLValue": true,
```

```
"isPure": false,
     "IValueRequested": false,
     "nodeType": "IndexAccess",
     "src": "2084:20:0",
     "typeDescriptions": {
       "typeIdentifier": "t_struct$_Ledger_$7_storage",
        "typeString": "struct LiminalFinancialSystem.Ledger
    }
  },
  "id": 72,
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": false,
  "memberLocation": "2105:14:0",
  "memberName": "mainnetBalance",
  "nodeType": "MemberAccess",
  "referencedDeclaration": 4,
  "src": "2084:35:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
"nodeType": "BinaryOperation",
```

```
"operator": ">=",
                                         "rightExpression": {
                                            "id": 73,
                                            "name": "amount",
                                            "nodeType": "Identifier",
                                            "overloadedDeclarations": [],
                                            "referencedDeclaration": 65,
                                            "src": "2123:6:0",
                                            "typeDescriptions": {
                                              "typeIdentifier": "t_uint256",
                                              "typeString": "uint256"
                                           }
                                         },
                                         "src": "2084:45:0",
                                         "typeDescriptions": {
                                            "typeIdentifier": "t_bool",
                                            "typeString": "bool"
                                         }
                                      },
                                      {
                                                                                           "hexValue":
"496e73756666696369656e74206d61696e6e65742062616c616e63652e",
                                         "id": 75,
                                         "isConstant": false,
                                         "isLValue": false,
                                         "isPure": true,
```

```
"kind": "string",
                                         "IValueRequested": false,
                                         "nodeType": "Literal",
                                         "src": "2131:31:0",
                                         "typeDescriptions": {
                                                                                       "typeldentifier":
"t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf45",
                                                     "typeString": "literal_string \"Insufficient mainnet
balance.\""
                                         },
                                         "value": "Insufficient mainnet balance."
                                      }
                                   ],
                                    "expression": {
                                      "argumentTypes": [
                                         {
                                            "typeIdentifier": "t_bool",
                                           "typeString": "bool"
                                         },
                                         {
                                                                                       "typeldentifier":
"t_stringliteral_a79d9bfa525ff020652d7c27b8413c0ac16067f192cc1189229771167008cf45",
                                                     "typeString": "literal_string \"Insufficient mainnet
balance.\""
                                         }
                                      ],
```

```
"id": 68,
                                      "name": "require",
                                       "nodeType": "Identifier",
                                      "overloadedDeclarations": [
                                         4294967278,
                                         4294967278
                                      ],
                                      "referencedDeclaration": 4294967278,
                                      "src": "2076:7:0",
                                      "typeDescriptions": {
                                                                                        "typeldentifier":
"t_function_require_pure$_t_bool_$_t_string_memory_ptr_$returns$__$",
                                         "typeString": "function (bool, string memory) pure"
                                      }
                                    },
                                    "id": 76,
                                    "isConstant": false,
                                    "isLValue": false,
                                    "isPure": false,
                                    "kind": "functionCall",
                                    "IValueRequested": false,
                                    "nameLocations": [],
                                    "names": [],
                                    "nodeType": "FunctionCall",
                                    "src": "2076:87:0",
                                    "tryCall": false,
```

```
"typeDescriptions": {
        "typeIdentifier": "t_tuple$__$",
       "typeString": "tuple()"
     }
  },
  "id": 77,
  "nodeType": "ExpressionStatement",
  "src": "2076:87:0"
},
{
  "expression": {
     "id": 83,
     "isConstant": false,
     "isLValue": false,
     "isPure": false,
     "IValueRequested": false,
     "leftHandSide": {
       "expression": {
          "baseExpression": {
             "id": 78,
             "name": "ledgers",
             "nodeType": "Identifier",
             "overloadedDeclarations": [],
             "referencedDeclaration": 19,
             "src": "2226:7:0",
             "typeDescriptions": {
```

```
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                            "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                           }
                                         },
                                         "id": 80,
                                         "indexExpression": {
                                           "id": 79,
                                           "name": "participant",
                                           "nodeType": "Identifier",
                                           "overloadedDeclarations": [],
                                           "referencedDeclaration": 63,
                                           "src": "2234:11:0",
                                           "typeDescriptions": {
                                              "typeIdentifier": "t_address",
                                              "typeString": "address"
                                           }
                                         },
                                         "isConstant": false,
                                         "isLValue": true,
                                         "isPure": false,
                                         "IValueRequested": false,
                                         "nodeType": "IndexAccess",
                                         "src": "2226:20:0",
                                         "typeDescriptions": {
```

```
"typeIdentifier": "t_struct$_Ledger_$7_storage",
```

"typeString": "struct LiminalFinancialSystem.Ledger

```
}
  },
  "id": 81,
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": true,
  "memberLocation": "2247:14:0",
  "memberName": "mainnetBalance",
  "nodeType": "MemberAccess",
  "referencedDeclaration": 4,
  "src": "2226:35:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
},
"nodeType": "Assignment",
"operator": "-=",
"rightHandSide": {
  "id": 82,
  "name": "amount",
  "nodeType": "Identifier",
```

```
"overloadedDeclarations": [],
        "referencedDeclaration": 65,
        "src": "2265:6:0",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
       }
     },
     "src": "2226:45:0",
     "typeDescriptions": {
       "typeIdentifier": "t_uint256",
       "typeString": "uint256"
     }
  },
  "id": 84,
  "nodeType": "ExpressionStatement",
  "src": "2226:45:0"
},
{
  "expression": {
     "id": 90,
     "isConstant": false,
     "isLValue": false,
     "isPure": false,
     "IValueRequested": false,
     "leftHandSide": {
```

```
"baseExpression": {
                                            "id": 85,
                                            "name": "ledgers",
                                            "nodeType": "Identifier",
                                            "overloadedDeclarations": [],
                                            "referencedDeclaration": 19,
                                            "src": "2281:7:0",
                                            "typeDescriptions": {
                                                                                       "typeIdentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                            "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                            }
                                         },
                                         "id": 87,
                                         "indexExpression": {
                                            "id": 86,
                                            "name": "participant",
                                            "nodeType": "Identifier",
                                            "overloadedDeclarations": [],
                                            "referencedDeclaration": 63,
                                            "src": "2289:11:0",
                                            "typeDescriptions": {
                                              "typeIdentifier": "t_address",
                                              "typeString": "address"
```

"expression": {

```
}
  },
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": false,
  "nodeType": "IndexAccess",
  "src": "2281:20:0",
  "typeDescriptions": {
     "typeIdentifier": "t_struct$_Ledger_$7_storage",
           "typeString": "struct LiminalFinancialSystem.Ledger
  }
},
"id": 88,
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": true,
"memberLocation": "2302:14:0",
"memberName": "testnetBalance",
"nodeType": "MemberAccess",
"referencedDeclaration": 6,
"src": "2281:35:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
```

```
"typeString": "uint256"
     }
  },
  "nodeType": "Assignment",
  "operator": "+=",
  "rightHandSide": {
     "id": 89,
     "name": "amount",
     "nodeType": "Identifier",
     "overloadedDeclarations": [],
     "referencedDeclaration": 65,
     "src": "2320:6:0",
     "typeDescriptions": {
       "typeIdentifier": "t_uint256",
       "typeString": "uint256"
     }
  },
  "src": "2281:45:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
"id": 91,
"nodeType": "ExpressionStatement",
"src": "2281:45:0"
```

```
},
{
  "expression": {
     "arguments": [
       {
          "arguments": [
            {
               "id": 96,
               "name": "participant",
               "nodeType": "Identifier",
               "overloadedDeclarations": [],
               "referencedDeclaration": 63,
               "src": "2398:11:0",
               "typeDescriptions": {
                  "typeIdentifier": "t_address",
                  "typeString": "address"
               }
             },
             {
               "id": 97,
               "name": "amount",
               "nodeType": "Identifier",
               "overloadedDeclarations": [],
               "referencedDeclaration": 65,
               "src": "2411:6:0",
               "typeDescriptions": {
```

```
"typeIdentifier": "t_uint256",
        "typeString": "uint256"
     }
  },
  {
     "id": 98,
     "name": "amount",
     "nodeType": "Identifier",
     "overloadedDeclarations": [],
     "referencedDeclaration": 65,
     "src": "2419:6:0",
     "typeDescriptions": {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
     }
  }
],
"expression": {
  "argumentTypes": [
     {
        "typeIdentifier": "t_address",
        "typeString": "address"
     },
     {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
```

```
{
                                                 "typeIdentifier": "t_uint256",
                                                 "typeString": "uint256"
                                              }
                                            ],
                                            "id": 95,
                                            "name": "Transaction",
                                            "nodeType": "Identifier",
                                            "overloadedDeclarations": [],
                                            "referencedDeclaration": 14,
                                            "src": "2386:11:0",
                                            "typeDescriptions": {
                                                                                        "typeldentifier":
"t_type$_t_struct$_Transaction_$14_storage_ptr_$",
                                                                              "typeString": "type(struct
LiminalFinancialSystem.Transaction storage pointer)"
                                            }
                                         },
                                         "id": 99,
                                         "isConstant": false,
                                         "isLValue": false,
                                         "isPure": false,
                                         "kind": "structConstructorCall",
                                         "IValueRequested": false,
                                         "nameLocations": [],
```

```
"names": [],
                                         "nodeType": "FunctionCall",
                                         "src": "2386:40:0",
                                         "tryCall": false,
                                         "typeDescriptions": {
                                                                                       "typeldentifier":
"t_struct$_Transaction_$14_memory_ptr",
                                             "typeString": "struct LiminalFinancialSystem.Transaction
memory"
                                         }
                                      }
                                   ],
                                    "expression": {
                                      "argumentTypes": [
                                        {
                                                                                       "typeldentifier":
"t_struct$_Transaction_$14_memory_ptr",
                                             "typeString": "struct LiminalFinancialSystem.Transaction
memory"
                                        }
                                      ],
                                      "expression": {
                                         "id": 92,
                                         "name": "transactions",
                                         "nodeType": "Identifier",
                                         "overloadedDeclarations": [],
```

```
"referencedDeclaration": 23,
                                        "src": "2368:12:0",
                                        "typeDescriptions": {
                                                                                    "typeldentifier":
"t_array$_t_struct$_Transaction_$14_storage_$dyn_storage",
                                           "typeString": "struct LiminalFinancialSystem.Transaction
storage ref[] storage ref"
                                       }
                                     },
                                     "id": 94,
                                     "isConstant": false,
                                     "isLValue": false,
                                     "isPure": false,
                                     "IValueRequested": false,
                                     "memberLocation": "2381:4:0",
                                     "memberName": "push",
                                     "nodeType": "MemberAccess",
                                     "src": "2368:17:0",
                                     "typeDescriptions": {
                                                                                    "typeldentifier":
"t_function_arraypush_nonpayable$_t_array$_t_struct$_Transaction_$14_storage_$dyn_storage_p
tr_$_t_struct$_Transaction_$14_storage_$returns$__$attached_to$_t_array$_t_struct$_Transactio
n_$14_storage_$dyn_storage_ptr_$",
                                                                      "typeString": "function (struct
LiminalFinancialSystem.Transaction
                                                           ref[]
                                                                       storage
                                                                                      pointer, struct
                                           storage
LiminalFinancialSystem.Transaction storage ref)"
```

```
},
     "id": 100,
     "isConstant": false,
     "isLValue": false,
     "isPure": false,
     "kind": "functionCall",
     "IValueRequested": false,
     "nameLocations": [],
     "names": [],
     "nodeType": "FunctionCall",
     "src": "2368:59:0",
     "tryCall": false,
     "typeDescriptions": {
        "typeIdentifier": "t_tuple$__$",
       "typeString": "tuple()"
     }
  },
  "id": 101,
  "nodeType": "ExpressionStatement",
  "src": "2368:59:0"
},
{
  "eventCall": {
     "arguments": [
       {
```

}

```
"id": 103,
  "name": "participant",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 63,
  "src": "2460:11:0",
  "typeDescriptions": {
     "typeIdentifier": "t_address",
     "typeString": "address"
  }
},
{
  "id": 104,
  "name": "amount",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 65,
  "src": "2473:6:0",
  "typeDescriptions": {
     "typeIdentifier": "t_uint256",
     "typeString": "uint256"
  }
},
{
  "id": 105,
  "name": "amount",
```

```
"nodeType": "Identifier",
     "overloadedDeclarations": [],
     "referencedDeclaration": 65,
     "src": "2481:6:0",
     "typeDescriptions": {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
     }
  }
],
"expression": {
   "argumentTypes": [
     {
        "typeIdentifier": "t_address",
        "typeString": "address"
     },
     {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
     },
     {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
     }
  ],
  "id": 102,
```

```
"name": "TransactionLogged",
                                       "nodeType": "Identifier",
                                       "overloadedDeclarations": [],
                                       "referencedDeclaration": 31,
                                       "src": "2442:17:0",
                                       "typeDescriptions": {
                                                                                        "typeldentifier":
"t_function_event_nonpayable$_t_address_$_t_uint256_$_t_uint256_$returns$__$",
                                         "typeString": "function (address,uint256,uint256)"
                                      }
                                    },
                                    "id": 106,
                                    "isConstant": false,
                                    "isLValue": false,
                                    "isPure": false,
                                    "kind": "functionCall",
                                    "IValueRequested": false,
                                    "nameLocations": [],
                                    "names": [],
                                    "nodeType": "FunctionCall",
                                    "src": "2442:46:0",
                                    "tryCall": false,
                                    "typeDescriptions": {
                                       "typeIdentifier": "t_tuple$__$",
                                       "typeString": "tuple()"
                                    }
```

```
},
  "id": 107,
  "nodeType": "EmitStatement",
  "src": "2437:51:0"
},
{
  "eventCall": {
     "arguments": [
       {
          "id": 109,
          "name": "participant",
          "nodeType": "Identifier",
          "overloadedDeclarations": [],
          "referencedDeclaration": 63,
          "src": "2547:11:0",
          "typeDescriptions": {
             "typeIdentifier": "t_address",
             "typeString": "address"
          }
       },
       {
          "expression": {
             "baseExpression": {
               "id": 110,
               "name": "ledgers",
               "nodeType": "Identifier",
```

```
"overloadedDeclarations": [],
                                              "referencedDeclaration": 19,
                                              "src": "2560:7:0",
                                              "typeDescriptions": {
                                                                                        "typeIdentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                             "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                              }
                                            },
                                            "id": 112,
                                            "indexExpression": {
                                              "id": 111,
                                              "name": "participant",
                                              "nodeType": "Identifier",
                                              "overloadedDeclarations": [],
                                              "referencedDeclaration": 63,
                                              "src": "2568:11:0",
                                              "typeDescriptions": {
                                                 "typeIdentifier": "t_address",
                                                 "typeString": "address"
                                              }
                                            },
                                            "isConstant": false,
                                            "isLValue": true,
                                            "isPure": false,
```

```
"IValueRequested": false,
   "nodeType": "IndexAccess",
  "src": "2560:20:0",
  "typeDescriptions": {
     "typeIdentifier": "t_struct$_Ledger_$7_storage",
         "typeString": "struct LiminalFinancialSystem.Ledger
  }
},
"id": 113,
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": false,
"memberLocation": "2581:14:0",
"memberName": "mainnetBalance",
"nodeType": "MemberAccess",
"referencedDeclaration": 4,
"src": "2560:35:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
"expression": {
```

{

```
"baseExpression": {
                                              "id": 114,
                                              "name": "ledgers",
                                              "nodeType": "Identifier",
                                              "overloadedDeclarations": [],
                                              "referencedDeclaration": 19,
                                              "src": "2597:7:0",
                                              "typeDescriptions": {
                                                                                        "typeldentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                             "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                              }
                                           },
                                            "id": 116,
                                            "indexExpression": {
                                              "id": 115,
                                              "name": "participant",
                                              "nodeType": "Identifier",
                                              "overloadedDeclarations": [],
                                              "referencedDeclaration": 63,
                                              "src": "2605:11:0",
                                              "typeDescriptions": {
                                                 "typeIdentifier": "t_address",
                                                 "typeString": "address"
                                              }
```

```
},
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": false,
  "nodeType": "IndexAccess",
  "src": "2597:20:0",
  "typeDescriptions": {
     "typeIdentifier": "t_struct$_Ledger_$7_storage",
        "typeString": "struct LiminalFinancialSystem.Ledger
  }
},
"id": 117,
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": false,
"memberLocation": "2618:14:0",
"memberName": "testnetBalance",
"nodeType": "MemberAccess",
"referencedDeclaration": 6,
"src": "2597:35:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
```

```
}
  }
],
"expression": {
  "argumentTypes": [
     {
        "typeIdentifier": "t_address",
        "typeString": "address"
     },
     {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
     },
     {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
     }
  ],
  "id": 108,
  "name": "LedgerUpdated",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 39,
  "src": "2533:13:0",
   "typeDescriptions": {
```

```
"t_function_event_nonpayable$_t_address_$_t_uint256_$_t_uint256_$returns$__$",
                                         "typeString": "function (address,uint256,uint256)"
                                       }
                                    },
                                    "id": 118,
                                    "isConstant": false,
                                    "isLValue": false,
                                    "isPure": false,
                                    "kind": "functionCall",
                                    "IValueRequested": false,
                                    "nameLocations": [],
                                    "names": [],
                                    "nodeType": "FunctionCall",
                                    "src": "2533:100:0",
                                    "tryCall": false,
                                    "typeDescriptions": {
                                       "typeIdentifier": "t_tuple$__$",
                                       "typeString": "tuple()"
                                    }
                                 },
                                 "id": 119,
                                  "nodeType": "EmitStatement",
                                  "src": "2528:105:0"
                               }
                            ]
                         },
```

```
"documentation": {
                           "id": 61,
                           "nodeType": "StructuredDocumentation",
                           "src": "1731:256:0",
                             "text": " @dev Perform a transaction, debiting the mainnet balance and
crediting the testnet balance.\n @param participant The address of the participant performing the
transaction.\n @param amount The amount to transfer between ledgers."
                         },
                         "functionSelector": "67844d2b",
                         "id": 121,
                         "implemented": true,
                         "kind": "function",
                         "modifiers": [],
                         "name": "performTransaction",
                         "nameLocation": "2001:18:0",
                         "nodeType": "FunctionDefinition",
                         "parameters": {
                           "id": 66,
                           "nodeType": "ParameterList",
                           "parameters": [
```

{

"constant": false,

"mutability": "mutable",

"name": "participant",

"nameLocation": "2028:11:0",

"id": 63,

```
"nodeType": "VariableDeclaration",
  "scope": 121,
  "src": "2020:19:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
     "typeIdentifier": "t_address",
     "typeString": "address"
  },
  "typeName": {
     "id": 62,
     "name": "address",
     "nodeType": "ElementaryTypeName",
     "src": "2020:7:0",
     "stateMutability": "nonpayable",
     "typeDescriptions": {
       "typeIdentifier": "t_address",
       "typeString": "address"
     }
  },
  "visibility": "internal"
},
{
  "constant": false,
  "id": 65,
  "mutability": "mutable",
```

```
"name": "amount",
        "nameLocation": "2049:6:0",
        "nodeType": "VariableDeclaration",
        "scope": 121,
        "src": "2041:14:0",
        "stateVariable": false,
        "storageLocation": "default",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
        },
        "typeName": {
          "id": 64,
          "name": "uint256",
          "nodeType": "ElementaryTypeName",
          "src": "2041:7:0",
          "typeDescriptions": {
             "typeIdentifier": "t_uint256",
             "typeString": "uint256"
          }
        },
        "visibility": "internal"
     }
  ],
  "src": "2019:37:0"
},
```

```
"returnParameters": {
     "id": 67,
     "nodeType": "ParameterList",
     "parameters": [],
     "src": "2066:0:0"
  },
  "scope": 146,
  "src": "1992:648:0",
  "stateMutability": "nonpayable",
  "virtual": false,
  "visibility": "external"
},
{
  "body": {
     "id": 134,
     "nodeType": "Block",
     "src": "2921:44:0",
     "statements": [
       {
          "expression": {
             "baseExpression": {
               "id": 130,
               "name": "ledgers",
               "nodeType": "Identifier",
               "overloadedDeclarations": [],
               "referencedDeclaration": 19,
```

```
"src": "2938:7:0",
                                      "typeDescriptions": {
                                                                                       "typeIdentifier":
"t_mapping$_t_address_$_t_struct$_Ledger_$7_storage_$",
                                                            "typeString": "mapping(address => struct
LiminalFinancialSystem.Ledger storage ref)"
                                      }
                                    },
                                    "id": 132,
                                    "indexExpression": {
                                      "id": 131,
                                      "name": "participant",
                                      "nodeType": "Identifier",
                                      "overloadedDeclarations": [],
                                      "referencedDeclaration": 124,
                                      "src": "2946:11:0",
                                      "typeDescriptions": {
                                         "typeIdentifier": "t_address",
                                         "typeString": "address"
                                      }
                                    },
                                    "isConstant": false,
                                    "isLValue": true,
                                    "isPure": false,
                                    "IValueRequested": false,
                                    "nodeType": "IndexAccess",
```

```
"src": "2938:20:0",
                                    "typeDescriptions": {
                                      "typeIdentifier": "t_struct$_Ledger_$7_storage",
                                         "typeString": "struct LiminalFinancialSystem.Ledger storage
ref"
                                   }
                                 },
                                 "functionReturnParameters": 129,
                                 "id": 133,
                                 "nodeType": "Return",
                                 "src": "2931:27:0"
                              }
                            ]
                         },
                         "documentation": {
                            "id": 122,
                            "nodeType": "StructuredDocumentation",
                            "src": "2646:194:0",
                                 "text": " @dev Getter function for a participant's ledger balances.\n
@param participant The address of the participant.\n @return Ledger memory The ledger of the
participant."
                         },
                         "functionSelector": "f7cd6af9",
                         "id": 135,
                         "implemented": true,
                         "kind": "function",
```

```
"modifiers": [],
"name": "getLedger",
"nameLocation": "2854:9:0",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 125,
  "nodeType": "ParameterList",
  "parameters": [
    {
       "constant": false,
       "id": 124,
       "mutability": "mutable",
       "name": "participant",
       "nameLocation": "2872:11:0",
       "nodeType": "VariableDeclaration",
       "scope": 135,
       "src": "2864:19:0",
       "stateVariable": false,
       "storageLocation": "default",
       "typeDescriptions": {
          "typeIdentifier": "t_address",
          "typeString": "address"
       },
       "typeName": {
          "id": 123,
          "name": "address",
```

```
"nodeType": "ElementaryTypeName",
          "src": "2864:7:0",
          "stateMutability": "nonpayable",
          "typeDescriptions": {
             "typeIdentifier": "t_address",
             "typeString": "address"
          }
       },
       "visibility": "internal"
     }
  ],
  "src": "2863:21:0"
},
"returnParameters": {
  "id": 129,
  "nodeType": "ParameterList",
  "parameters": [
     {
       "constant": false,
       "id": 128,
        "mutability": "mutable",
        "name": "",
        "nameLocation": "-1:-1:-1",
        "nodeType": "VariableDeclaration",
        "scope": 135,
        "src": "2906:13:0",
```

```
"stateVariable": false,
"storageLocation": "memory",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Ledger_$7_memory_ptr",
  "typeString": "struct LiminalFinancialSystem.Ledger"
},
"typeName": {
  "id": 127,
  "nodeType": "UserDefinedTypeName",
  "pathNode": {
     "id": 126,
     "name": "Ledger",
     "nameLocations": [
       "2906:6:0"
     ],
     "nodeType": "IdentifierPath",
     "referencedDeclaration": 7,
     "src": "2906:6:0"
  },
  "referencedDeclaration": 7,
  "src": "2906:6:0",
   "typeDescriptions": {
     "typeIdentifier": "t_struct$_Ledger_$7_storage_ptr",
     "typeString": "struct LiminalFinancialSystem.Ledger"
  }
},
```

```
"visibility": "internal"
        }
     ],
     "src": "2905:15:0"
  },
  "scope": 146,
  "src": "2845:120:0",
  "stateMutability": "view",
  "virtual": false,
  "visibility": "public"
},
{
  "body": {
     "id": 144,
     "nodeType": "Block",
     "src": "3178:43:0",
     "statements": [
        {
          "expression": {
             "expression": {
                "id": 141,
                "name": "transactions",
                "nodeType": "Identifier",
                "overloadedDeclarations": [],
                "referencedDeclaration": 23,
                "src": "3195:12:0",
```

```
"typeDescriptions": {
```

"typeldentifier":

```
"t_array$_t_struct$_Transaction_$14_storage_$dyn_storage",
                                            "typeString": "struct LiminalFinancialSystem.Transaction
storage ref[] storage ref"
                                     }
                                   },
                                   "id": 142,
                                   "isConstant": false,
                                   "isLValue": false,
                                   "isPure": false,
                                   "IValueRequested": false,
                                   "memberLocation": "3208:6:0",
                                   "memberName": "length",
                                   "nodeType": "MemberAccess",
                                   "src": "3195:19:0",
                                   "typeDescriptions": {
                                      "typeIdentifier": "t_uint256",
                                      "typeString": "uint256"
                                   }
                                },
                                 "functionReturnParameters": 140,
```

"id": 143,

}

"nodeType": "Return",

"src": "3188:26:0"

```
]
                         },
                         "documentation": {
                            "id": 136,
                            "nodeType": "StructuredDocumentation",
                            "src": "2971:140:0",
                            "text": " @dev Getter function for total transactions (for demonstration).\n
@return uint256 The total number of transactions."
                         },
                         "functionSelector": "b5c604ff",
                         "id": 145,
                         "implemented": true,
                         "kind": "function",
                         "modifiers": [],
                         "name": "getTotalTransactions",
                         "nameLocation": "3125:20:0",
                         "nodeType": "FunctionDefinition",
                         "parameters": {
                            "id": 137,
                            "nodeType": "ParameterList",
                            "parameters": [],
                            "src": "3145:2:0"
                         },
                         "returnParameters": {
                            "id": 140,
                            "nodeType": "ParameterList",
```

```
"parameters": [
  {
     "constant": false,
     "id": 139,
     "mutability": "mutable",
     "name": "",
     "nameLocation": "-1:-1:-1",
     "nodeType": "VariableDeclaration",
     "scope": 145,
     "src": "3169:7:0",
     "stateVariable": false,
     "storageLocation": "default",
     "typeDescriptions": {
        "typeIdentifier": "t_uint256",
       "typeString": "uint256"
     },
     "typeName": {
       "id": 138,
       "name": "uint256",
        "nodeType": "ElementaryTypeName",
        "src": "3169:7:0",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
       }
     },
```

```
"visibility": "internal"
                        }
                     ],
                      "src": "3168:9:0"
                   },
                   "scope": 146,
                   "src": "3116:105:0",
                   "stateMutability": "view",
                   "virtual": false,
                   "visibility": "public"
                }
             ],
             "scope": 147,
             "src": "393:2830:0",
             "usedErrors": [],
             "usedEvents": [
                31,
                39
             ]
           }
        ],
        "src": "32:3191:0"
     },
     "id": 0
  }
}
```

}
}