

PROGRAM:

```
{
  "contractName": "Migrations",
  "abi": [
    {
      "constant": true,
      "inputs": [],
      "name": "last_completed_migration",
      "outputs": [
        {
          "name": "",
          "type": "uint256"
        }
      ],
      "payable": false,
      "stateMutability": "view",
      "type": "function"
    },
    {
      "constant": true,
      "inputs": [],
      "name": "owner",
      "outputs": [
        {
```

```
    "name": "",
    "type": "address"
  }
],
"payable": false,
"stateMutability": "view",
"type": "function"
},
{
  "inputs": [],
  "payable": false,
  "stateMutability": "nonpayable",
  "type": "constructor"
},
{
  "constant": false,
  "inputs": [
    {
      "name": "completed",
      "type": "uint256"
    }
  ],
  "name": "setCompleted",
  "outputs": [],
```

```
"payable": false,
"stateMutability": "nonpayable",
"type": "function"
},
{
  "constant": false,
  "inputs": [
    {
      "name": "new_address",
      "type": "address"
    }
  ],
  "name": "upgrade",
  "outputs": [],
  "payable": false,
  "stateMutability": "nonpayable",
  "type": "function"
}
],
"bytecode":
"0x608060405234801561001057600080fd5b50336000806101000a81548173fffff
ffffffffffffffffffffffff021916908373ffffffffffffffffffffffff160217905550
610314806100606000396000f3fe608060405260043610610062576000357c0100
00000000000000000000000000000000000000000000000000000000900463ffffff1
680630900f01014610067578063445df0ac146100b85780638da5cb5b146100e357
8063fdacd5761461013a575b600080fd5b34801561007357600080fd5b506100b66
```


830381600087803b15801561024057600080fd5b505af1158015610254573d6000
803e3d6000fd5b50505050505b50565b60015481565b6000809054906101000a90
0473ffffffffffffffffffffffffffffffff1681565b6000809054906101000a900473ffffffff
ffffffffffffffffffffffffffffffff1673ffffffffffffffffffffffffffffffff163373ffffffffffffffffffffffff
ffffffff1614156102e557806001819055505b5056fea165627a7a7230582093e5c
0dbc2c999e37b4c1068da45c0da4f22130961b265599640347b5dba708f0029",

"sourceMap": "25:480:1:-;;;177:50;8:9:-
1;5:2;;;30:1;27;20:12;5:2;177:50:1;212:10;204:5;;;18;;;;;;;;;;;;;25:480;;;;;",

"deployedSourceMap": "25:480:1:-;;;;;;;;;;;;;338:165;;8:9:-
1;5:2;;;30:1;27;20:12;5:2;338:165:1;;;;;13:2:-
1;8:3;5:11;2:2;;;29:1;26;19:12;2:2;338:165:1;;;;;;;;;;;;;73:36;;8:9:-
1;5:2;;;30:1;27;20:12;5:2;73:36:1;;;;;;;;;;;;;49:20;;8:9:-
1;5:2;;;30:1;27;20:12;5:2;49:20:1;;;;;;;;;;;;;231:103;;8:9:-
1;5:2;;;30:1;27;20:12;5:2;231:103:1;;;;;13:2:-
1;8:3;5:11;2:2;;;29:1;26;19:12;2:2;231:103:1;;;;;;;;;;;;;338:165;160:5;;;;;;;;;14
6:19;;10;;19;;142:26;;400:19;433:11;400:45;;451:8;;21;;473:24;;451:47;;;;;;;;;
;;;;;;;;;;;;;8:9:-1;5:2;;;30:1;27;20:12;5:2;451:47:1;;;8:9:-
1;5:2;;;45:16;42:1;39;24:38;77:16;74:1;67:27;5:2;451:47:1;;;167:1;142:26;338:16
5;;;o;73:36:-;:::o;49:20:-;:::o;231:103:-
;160:5;;;;;;;;;146:19;;10;;19;;142:26;;320:9;293:24;;36;;;142:26;231:103;;;o",

"source": "pragma solidity ^0.5.0;\n\ncontract Migrations {\n address public
owner;\n uint public last_completed_migration;\n\n modifier restricted() {\n if
(msg.sender == owner) _;\n }\n\n constructor() public {\n owner =
msg.sender;\n }\n\n function setCompleted(uint completed) public restricted {\n last_completed_migration = completed;\n }\n\n function upgrade(address
new_address) public restricted {\n Migrations upgraded =
Migrations(new_address);\n upgraded.setCompleted(last_completed_migration);\n }\n}

"sourcePath": "/home/kapoor13/Desktop/lasttry/contracts/Migrations.sol",

"ast": {

"absolutePath": "/home/kapoor13/Desktop/lasttry/contracts/Migrations.sol",

"exportedSymbols": {

```
"Migrations": [
  154
]
},
"id": 155,
"nodeType": "SourceUnit",
"nodes": [
  {
    "id": 99,
    "literals": [
      "solidity",
      "^",
      "0.5",
      ".0"
    ],
    "nodeType": "PragmaDirective",
    "src": "0:23:1"
  },
  {
    "baseContracts": [],
    "contractDependencies": [],
    "contractKind": "contract",
    "documentation": null,
    "fullyImplemented": true,
```

```
"id": 154,
"linearizedBaseContracts": [
  154
],
"name": "Migrations",
"nodeType": "ContractDefinition",
"nodes": [
  {
    "constant": false,
    "id": 101,
    "name": "owner",
    "nodeType": "VariableDeclaration",
    "scope": 154,
    "src": "49:20:1",
    "stateVariable": true,
    "storageLocation": "default",
    "typeDescriptions": {
      "typeIdentifier": "t_address",
      "typeString": "address"
    },
  },
  "typeName": {
    "id": 100,
    "name": "address",
    "nodeType": "ElementaryTypeName",
```

```
"src": "49:7:1",
"stateMutability": "nonpayable",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
},
"value": null,
"visibility": "public"
},
{
  "constant": false,
  "id": 103,
  "name": "last_completed_migration",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "73:36:1",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
```



```
"id": 102,  
"name": "uint",  
"nodeType": "ElementaryTypeName",  
"src": "73:4:1",  
"typeDescriptions": {  
  "typeIdentifier": "t_uint256",  
  "typeString": "uint256"  
}  
,  
"value": null,  
"visibility": "public"  
},  
{  
  "body": {  
    "id": 111,  
    "nodeType": "Block",  
    "src": "136:37:1",  
    "statements": [  
      {  
        "condition": {  
          "argumentTypes": null,  
          "commonType": {  
            "typeIdentifier": "t_address",  
            "typeString": "address"
```

```
},
  "id": 108,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "lValueRequested": false,
  "leftExpression": {
    "argumentTypes": null,
    "expression": {
      "argumentTypes": null,
      "id": 105,
      "name": "msg",
      "nodeType": "Identifier",
      "overloadedDeclarations": [],
      "referencedDeclaration": 169,
      "src": "146:3:1",
      "typeDescriptions": {
        "typeIdentifier": "t_magic_message",
        "typeString": "msg"
      }
    }
  },
  "id": 106,
  "isConstant": false,
  "isLValue": false,
```

```
"isPure": false,
"lValueRequested": false,
"memberName": "sender",
"nodeType": "MemberAccess",
"referencedDeclaration": null,
"src": "146:10:1",
"typeDescriptions": {
  "typeIdentifier": "t_address_payable",
  "typeString": "address payable"
}
},
"nodeType": "BinaryOperation",
"operator": "==",
"rightExpression": {
  "argumentTypes": null,
  "id": 107,
  "name": "owner",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 101,
  "src": "160:5:1",
  "typeDescriptions": {
    "typeIdentifier": "t_address",
    "typeString": "address"
  }
}
```

```
    }  
  },  
  "src": "146:19:1",  
  "typeDescriptions": {  
    "typeIdentifier": "t_bool",  
    "typeString": "bool"  
  }  
},  
"falseBody": null,  
"id": 110,  
"nodeType": "IfStatement",  
"src": "142:26:1",  
"trueBody": {  
  "id": 109,  
  "nodeType": "PlaceholderStatement",  
  "src": "167:1:1"  
}  
}  
]  
},  
"documentation": null,  
"id": 112,  
"name": "restricted",  
"nodeType": "ModifierDefinition",
```

```
"parameters": {
  "id": 104,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "133:2:1"
},
"src": "114:59:1",
"visibility": "internal"
},
{
  "body": {
    "id": 120,
    "nodeType": "Block",
    "src": "198:29:1",
    "statements": [
      {
        "expression": {
          "argumentTypes": null,
          "id": 118,
          "isConstant": false,
          "isLValue": false,
          "isPure": false,
          "lValueRequested": false,
          "leftHandSide": {
```

```
"argumentTypes": null,
"id": 115,
"name": "owner",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 101,
"src": "204:5:1",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
}
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 116,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 169,
    "src": "212:3:1",
```

```
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
      "typeString": "msg"
    }
  },
  "id": 117,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "lValueRequested": false,
  "memberName": "sender",
  "nodeType": "MemberAccess",
  "referencedDeclaration": null,
  "src": "212:10:1",
  "typeDescriptions": {
    "typeIdentifier": "t_address_payable",
    "typeString": "address payable"
  }
},
"src": "204:18:1",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
}
```

```
    },  
    "id": 119,  
    "nodeType": "ExpressionStatement",  
    "src": "204:18:1"  
  }  
]  
},  
"documentation": null,  
"id": 121,  
"implemented": true,  
"kind": "constructor",  
"modifiers": [],  
"name": "",  
"nodeType": "FunctionDefinition",  
"parameters": {  
  "id": 113,  
  "nodeType": "ParameterList",  
  "parameters": [],  
  "src": "188:2:1"  
},  
"returnParameters": {  
  "id": 114,  
  "nodeType": "ParameterList",  
  "parameters": [],
```



```
"src": "198:0:1"
},
"scope": 154,
"src": "177:50:1",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 132,
    "nodeType": "Block",
    "src": "287:47:1",
    "statements": [
      {
        "expression": {
          "argumentTypes": null,
          "id": 130,
          "isConstant": false,
          "isLValue": false,
          "isPure": false,
          "lValueRequested": false,
          "leftHandSide": {
            "argumentTypes": null,
```

```
"id": 128,  
"name": "last_completed_migration",  
"nodeType": "Identifier",  
"overloadedDeclarations": [],  
"referencedDeclaration": 103,  
"src": "293:24:1",  
"typeDescriptions": {  
  "typeIdentifier": "t_uint256",  
  "typeString": "uint256"  
}  
},  
"nodeType": "Assignment",  
"operator": "=",  
"rightHandSide": {  
  "argumentTypes": null,  
  "id": 129,  
  "name": "completed",  
  "nodeType": "Identifier",  
  "overloadedDeclarations": [],  
  "referencedDeclaration": 123,  
  "src": "320:9:1",  
  "typeDescriptions": {  
    "typeIdentifier": "t_uint256",  
    "typeString": "uint256"
```

```
    }  
  },  
  "src": "293:36:1",  
  "typeDescriptions": {  
    "typeIdentifier": "t_uint256",  
    "typeString": "uint256"  
  }  
},  
"id": 131,  
"nodeType": "ExpressionStatement",  
"src": "293:36:1"  
}  
]  
},  
"documentation": null,  
"id": 133,  
"implemented": true,  
"kind": "function",  
"modifiers": [  
  {  
    "arguments": null,  
    "id": 126,  
    "modifierName": {  
      "argumentTypes": null,
```

```
"id": 125,  
  "name": "restricted",  
  "nodeType": "Identifier",  
  "overloadedDeclarations": [],  
  "referencedDeclaration": 112,  
  "src": "276:10:1",  
  "typeDescriptions": {  
    "typeIdentifier": "t_modifier$__$",  
    "typeString": "modifier ()"  
  }  
},  
  "nodeType": "ModifierInvocation",  
  "src": "276:10:1"  
}  
],  
  "name": "setCompleted",  
  "nodeType": "FunctionDefinition",  
  "parameters": {  
    "id": 124,  
    "nodeType": "ParameterList",  
    "parameters": [  
      {  
        "constant": false,  
        "id": 123,
```

```
"name": "completed",
"nodeType": "VariableDeclaration",
"scope": 133,
"src": "253:14:1",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"typeName": {
  "id": 122,
  "name": "uint",
  "nodeType": "ElementaryTypeName",
  "src": "253:4:1",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"value": null,
"visibility": "internal"
},
```

```
"src": "252:16:1"
},
"returnParameters": {
  "id": 127,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "287:0:1"
},
"scope": 154,
"src": "231:103:1",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 152,
    "nodeType": "Block",
    "src": "394:109:1",
    "statements": [
      {
        "assignments": [
          141
        ],
      },
    ],
  },
}
```

```
"declarations": [  
  {  
    "constant": false,  
    "id": 141,  
    "name": "upgraded",  
    "nodeType": "VariableDeclaration",  
    "scope": 152,  
    "src": "400:19:1",  
    "stateVariable": false,  
    "storageLocation": "default",  
    "typeDescriptions": {  
      "typeIdentifier": "t_contract$_Migrations_$154",  
      "typeString": "contract Migrations"  
    },  
    "typeName": {  
      "contractScope": null,  
      "id": 140,  
      "name": "Migrations",  
      "nodeType": "UserDefinedTypeName",  
      "referencedDeclaration": 154,  
      "src": "400:10:1",  
      "typeDescriptions": {  
        "typeIdentifier": "t_contract$_Migrations_$154",  
        "typeString": "contract Migrations"  
      }  
    }  
  }  
]
```

```
    }  
  },  
  "value": null,  
  "visibility": "internal"  
}  
],  
"id": 145,  
"initialValue": {  
  "argumentTypes": null,  
  "arguments": [  
    {  
      "argumentTypes": null,  
      "id": 143,  
      "name": "new_address",  
      "nodeType": "Identifier",  
      "overloadedDeclarations": [],  
      "referencedDeclaration": 135,  
      "src": "433:11:1",  
      "typeDescriptions": {  
        "typeIdentifier": "t_address",  
        "typeString": "address"  
      }  
    }  
  ]  
},  
],
```



```
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_address",
      "typeString": "address"
    }
  ],
  "id": 142,
  "name": "Migrations",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 154,
  "src": "422:10:1",
  "typeDescriptions": {
    "typeIdentifier": "t_type$_t_contract$_Migrations_$154_$",
    "typeString": "type(contract Migrations)"
  }
},
"id": 144,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "typeConversion",
"lValueRequested": false,
```

```
"names": [],
"nodeType": "FunctionCall",
"src": "422:23:1",
"typeDescriptions": {
  "typeIdentifier": "t_contract$_Migrations_$154",
  "typeString": "contract Migrations"
}
},
"nodeType": "VariableDeclarationStatement",
"src": "400:45:1"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "id": 149,
        "name": "last_completed_migration",
        "nodeType": "Identifier",
        "overloadedDeclarations": [],
        "referencedDeclaration": 103,
        "src": "473:24:1",
        "typeDescriptions": {
```

```
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
}
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  ],
  "expression": {
    "argumentTypes": null,
    "id": 146,
    "name": "upgraded",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 141,
    "src": "451:8:1",
    "typeDescriptions": {
      "typeIdentifier": "t_contract$_Migrations_$154",
      "typeString": "contract Migrations"
    }
  }
}
```

```

    },
    "id": 148,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
    "memberName": "setCompleted",
    "nodeType": "MemberAccess",
    "referencedDeclaration": 133,
    "src": "451:21:1",
    "typeDescriptions": {
      "typeIdentifier":
        "t_function_external_nonpayable$_t_uint256_$returns$__$",
      "typeString": "function (uint256) external"
    }
  },
  "id": 150,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "451:47:1",

```

```
    "typeDescriptions": {
      "typeIdentifier": "t_tuple$__$",
      "typeString": "tuple()"
    }
  },
  "id": 151,
  "nodeType": "ExpressionStatement",
  "src": "451:47:1"
}
]
},
"documentation": null,
"id": 153,
"implemented": true,
"kind": "function",
"modifiers": [
  {
    "arguments": null,
    "id": 138,
    "modifierName": {
      "argumentTypes": null,
      "id": 137,
      "name": "restricted",
      "nodeType": "Identifier",
```

```
    "overloadedDeclarations": [],
    "referencedDeclaration": 112,
    "src": "383:10:1",
    "typeDescriptions": {
      "typeIdentifier": "t_modifier$__$",
      "typeString": "modifier ()"
    }
  },
  "nodeType": "ModifierInvocation",
  "src": "383:10:1"
}
],
"name": "upgrade",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 136,
  "nodeType": "ParameterList",
  "parameters": [
    {
      "constant": false,
      "id": 135,
      "name": "new_address",
      "nodeType": "VariableDeclaration",
      "scope": 153,
```

```
"src": "355:19:1",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
},
"typeName": {
  "id": 134,
  "name": "address",
  "nodeType": "ElementaryTypeName",
  "src": "355:7:1",
  "stateMutability": "nonpayable",
  "typeDescriptions": {
    "typeIdentifier": "t_address",
    "typeString": "address"
  }
},
"value": null,
"visibility": "internal"
}
],
"src": "354:21:1"
},
```

```
"returnParameters": {
  "id": 139,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "394:0:1"
},
"scope": 154,
"src": "338:165:1",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
}
],
"scope": 155,
"src": "25:480:1"
}
],
"src": "0:506:1"
},
"legacyAST": {
  "absolutePath": "/home/kapoor13/Desktop/lasttry/contracts/Migrations.sol",
  "exportedSymbols": {
    "Migrations": [
      154
```



```
]
},
"id": 155,
"nodeType": "SourceUnit",
"nodes": [
{
  "id": 99,
  "literals": [
    "solidity",
    "^",
    "0.5",
    ".0"
  ],
  "nodeType": "PragmaDirective",
  "src": "0:23:1"
},
{
  "baseContracts": [],
  "contractDependencies": [],
  "contractKind": "contract",
  "documentation": null,
  "fullyImplemented": true,
  "id": 154,
  "linearizedBaseContracts": [
```

154

```
],  
"name": "Migrations",  
"nodeType": "ContractDefinition",  
"nodes": [  
  {  
    "constant": false,  
    "id": 101,  
    "name": "owner",  
    "nodeType": "VariableDeclaration",  
    "scope": 154,  
    "src": "49:20:1",  
    "stateVariable": true,  
    "storageLocation": "default",  
    "typeDescriptions": {  
      "typeIdentifier": "t_address",  
      "typeString": "address"  
    },  
  },  
  "typeName": {  
    "id": 100,  
    "name": "address",  
    "nodeType": "ElementaryTypeName",  
    "src": "49:7:1",  
    "stateMutability": "nonpayable",
```

```
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
},
"value": null,
"visibility": "public",
{
  "constant": false,
  "id": 103,
  "name": "last_completed_migration",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "73:36:1",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
    "id": 102,
    "name": "uint",
```

```
"nodeType": "ElementaryTypeName",
"src": "73:4:1",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"value": null,
"visibility": "public"
},
{
  "body": {
    "id": 111,
    "nodeType": "Block",
    "src": "136:37:1",
    "statements": [
      {
        "condition": {
          "argumentTypes": null,
          "commonType": {
            "typeIdentifier": "t_address",
            "typeString": "address"
          },
          "id": 108,
```

```
"isConstant": false,
"isLValue": false,
"isPure": false,
"IValueRequested": false,
"leftExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 105,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 169,
    "src": "146:3:1",
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
      "typeString": "msg"
    }
  }
},
"id": 106,
"isConstant": false,
"isLValue": false,
"isPure": false,
"IValueRequested": false,
```

```
"memberName": "sender",
"nodeType": "MemberAccess",
"referencedDeclaration": null,
"src": "146:10:1",
"typeDescriptions": {
  "typeIdentifier": "t_address_payable",
  "typeString": "address payable"
}
},
"nodeType": "BinaryOperation",
"operator": "=",
"rightExpression": {
  "argumentTypes": null,
  "id": 107,
  "name": "owner",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 101,
  "src": "160:5:1",
  "typeDescriptions": {
    "typeIdentifier": "t_address",
    "typeString": "address"
  }
}
},
```

```
    "src": "146:19:1",
    "typeDescriptions": {
      "typeIdentifier": "t_bool",
      "typeString": "bool"
    }
  },
  "falseBody": null,
  "id": 110,
  "nodeType": "IfStatement",
  "src": "142:26:1",
  "trueBody": {
    "id": 109,
    "nodeType": "PlaceholderStatement",
    "src": "167:1:1"
  }
}
]
},
"documentation": null,
"id": 112,
"name": "restricted",
"nodeType": "ModifierDefinition",
"parameters": {
  "id": 104,
```

```
"nodeType": "ParameterList",
"parameters": [],
"src": "133:2:1"
},
"src": "114:59:1",
"visibility": "internal"
},
{
  "body": {
    "id": 120,
    "nodeType": "Block",
    "src": "198:29:1",
    "statements": [
      {
        "expression": {
          "argumentTypes": null,
          "id": 118,
          "isConstant": false,
          "isLValue": false,
          "isPure": false,
          "lValueRequested": false,
          "leftHandSide": {
            "argumentTypes": null,
            "id": 115,
```



```
"name": "owner",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 101,
"src": "204:5:1",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
}
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 116,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 169,
    "src": "212:3:1",
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
```

```
        "typeString": "msg"
    }
},
    "id": 117,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
    "memberName": "sender",
    "nodeType": "MemberAccess",
    "referencedDeclaration": null,
    "src": "212:10:1",
    "typeDescriptions": {
        "typeIdentifier": "t_address_payable",
        "typeString": "address payable"
    }
},
    "src": "204:18:1",
    "typeDescriptions": {
        "typeIdentifier": "t_address",
        "typeString": "address"
    }
},
    "id": 119,
```

```
    "nodeType": "ExpressionStatement",
    "src": "204:18:1"
  }
]
},
"documentation": null,
"id": 121,
"implemented": true,
"kind": "constructor",
"modifiers": [],
"name": "",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 113,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "188:2:1"
},
"returnParameters": {
  "id": 114,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "198:0:1"
},
```

```
"scope": 154,  
"src": "177:50:1",  
"stateMutability": "nonpayable",  
"superFunction": null,  
"visibility": "public"  
},  
{  
  "body": {  
    "id": 132,  
    "nodeType": "Block",  
    "src": "287:47:1",  
    "statements": [  
      {  
        "expression": {  
          "argumentTypes": null,  
          "id": 130,  
          "isConstant": false,  
          "isLValue": false,  
          "isPure": false,  
          "IValueRequested": false,  
          "leftHandSide": {  
            "argumentTypes": null,  
            "id": 128,  
            "name": "last_completed_migration",
```

```
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 103,
"src": "293:24:1",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "id": 129,
  "name": "completed",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 123,
  "src": "320:9:1",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
}
},
```

```
    "src": "293:36:1",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
  "id": 131,
  "nodeType": "ExpressionStatement",
  "src": "293:36:1"
}
]
},
"documentation": null,
"id": 133,
"implemented": true,
"kind": "function",
"modifiers": [
  {
    "arguments": null,
    "id": 126,
    "modifierName": {
      "argumentTypes": null,
      "id": 125,
      "name": "restricted",
```

```
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 112,
"src": "276:10:1",
"typeDescriptions": {
  "typeIdentifier": "t_modifier$__$",
  "typeString": "modifier ()"
}
},
"nodeType": "ModifierInvocation",
"src": "276:10:1"
}
],
"name": "setCompleted",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 124,
  "nodeType": "ParameterList",
  "parameters": [
    {
      "constant": false,
      "id": 123,
      "name": "completed",
      "nodeType": "VariableDeclaration",
```

```
"scope": 133,  
"src": "253:14:1",  
"stateVariable": false,  
"storageLocation": "default",  
"typeDescriptions": {  
  "typeIdentifier": "t_uint256",  
  "typeString": "uint256"  
},  
"typeName": {  
  "id": 122,  
  "name": "uint",  
  "nodeType": "ElementaryTypeName",  
  "src": "253:4:1",  
  "typeDescriptions": {  
    "typeIdentifier": "t_uint256",  
    "typeString": "uint256"  
  }  
},  
"value": null,  
"visibility": "internal"  
}  
],  
"src": "252:16:1"  
},
```



```
"returnParameters": {
  "id": 127,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "287:0:1"
},
"scope": 154,
"src": "231:103:1",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 152,
    "nodeType": "Block",
    "src": "394:109:1",
    "statements": [
      {
        "assignments": [
          141
        ],
        "declarations": [
          {
```

```
"constant": false,
"id": 141,
"name": "upgraded",
"nodeType": "VariableDeclaration",
"scope": 152,
"src": "400:19:1",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_contract$_Migrations_$154",
  "typeString": "contract Migrations"
},
"typeName": {
  "contractScope": null,
  "id": 140,
  "name": "Migrations",
  "nodeType": "UserDefinedTypeName",
  "referencedDeclaration": 154,
  "src": "400:10:1",
  "typeDescriptions": {
    "typeIdentifier": "t_contract$_Migrations_$154",
    "typeString": "contract Migrations"
  }
},
```

```
    "value": null,  
    "visibility": "internal"  
  },  
],  
"id": 145,  
"initialValue": {  
  "argumentTypes": null,  
  "arguments": [  
    {  
      "argumentTypes": null,  
      "id": 143,  
      "name": "new_address",  
      "nodeType": "Identifier",  
      "overloadedDeclarations": [],  
      "referencedDeclaration": 135,  
      "src": "433:11:1",  
      "typeDescriptions": {  
        "typeIdentifier": "t_address",  
        "typeString": "address"  
      }  
    }  
  ],  
  "expression": {  
    "argumentTypes": [  

```

```
{
  "typeIdentifier": "t_address",
  "typeString": "address"
}
],
"id": 142,
"name": "Migrations",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 154,
"src": "422:10:1",
"typeDescriptions": {
  "typeIdentifier": "t_type$_t_contract$_Migrations_$154_$",
  "typeString": "type(contract Migrations)"
}
},
"id": 144,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "typeConversion",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
```

```
"src": "422:23:1",
"typeDescriptions": {
  "typeIdentifier": "t_contract$_Migrations_$154",
  "typeString": "contract Migrations"
},
},
"nodeType": "VariableDeclarationStatement",
"src": "400:45:1"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "id": 149,
        "name": "last_completed_migration",
        "nodeType": "Identifier",
        "overloadedDeclarations": [],
        "referencedDeclaration": 103,
        "src": "473:24:1",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
        }
      }
    ]
  }
}
```

```
    }
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  ],
  "expression": {
    "argumentTypes": null,
    "id": 146,
    "name": "upgraded",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 141,
    "src": "451:8:1",
    "typeDescriptions": {
      "typeIdentifier": "t_contract$_Migrations_$154",
      "typeString": "contract Migrations"
    }
  },
  "id": 148,
```

```
"isConstant": false,
"isLValue": false,
"isPure": false,
"lValueRequested": false,
"memberName": "setCompleted",
"nodeType": "MemberAccess",
"referencedDeclaration": 133,
"src": "451:21:1",
"typeDescriptions": {
  "typeIdentifier":
    "t_function_external_nonpayable$_t_uint256_$returns$__$",
  "typeString": "function (uint256) external"
},
},
"id": 150,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "451:47:1",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
```

```
    "typeString": "tuple()"
  }
},
"id": 151,
"nodeType": "ExpressionStatement",
"src": "451:47:1"
}
],
},
"documentation": null,
"id": 153,
"implemented": true,
"kind": "function",
"modifiers": [
{
  "arguments": null,
  "id": 138,
  "modifierName": {
    "argumentTypes": null,
    "id": 137,
    "name": "restricted",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 112,
```



```
"src": "383:10:1",
"typeDescriptions": {
  "typeIdentifier": "t_modifier$__$",
  "typeString": "modifier ()"
},
},
"nodeType": "ModifierInvocation",
"src": "383:10:1"
},
],
"name": "upgrade",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 136,
  "nodeType": "ParameterList",
  "parameters": [
    {
      "constant": false,
      "id": 135,
      "name": "new_address",
      "nodeType": "VariableDeclaration",
      "scope": 153,
      "src": "355:19:1",
      "stateVariable": false,
```

```
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
},
"typeName": {
  "id": 134,
  "name": "address",
  "nodeType": "ElementaryTypeName",
  "src": "355:7:1",
  "stateMutability": "nonpayable",
  "typeDescriptions": {
    "typeIdentifier": "t_address",
    "typeString": "address"
  }
},
"value": null,
"visibility": "internal"
}
],
"src": "354:21:1"
},
"returnParameters": {
  "id": 139,
```

```
    "nodeType": "ParameterList",
    "parameters": [],
    "src": "394:0:1"
  },
  "scope": 154,
  "src": "338:165:1",
  "stateMutability": "nonpayable",
  "superFunction": null,
  "visibility": "public"
}
],
"scope": 155,
"src": "25:480:1"
}
],
"src": "0:506:1"
},
"compiler": {
  "name": "solc",
  "version": "0.5.0+commit.1d4f565a.Emscripten.clang"
},
"networks": {
  "1369": {
    "events": {},
```

```
"links": {},  
  "address": "0xaADbDb0Dc8af4cCb26C06D5bcd24e0a3267cCdCc",  
  "transactionHash":  
    "0x8f5d68e99b949492e2f7fe7df4e4a8652e5af7eaad187492c183623730498dcb"  
  }  
},  
  "schemaVersion": "3.0.12",  
  "updatedAt": "2019-08-21T19:13:08.337Z"  
}
```