

## PROGRAM:

```
{
  "contractName ": "Election",
  "abi": [
    {
      "constant": true,
      "inputs": [],
      "name": "candidates Count",
      "outputs": [
        {
          "name": "",
          "type": "uint256"
        }
      ],
      "payable": false,
      "stateMutability": "view",
      "type": "function"
    },
    {
      "constant": true,
      "inputs": [
        {
          "name": "",
          "type": "uint256"
        }
      ],
      "name": "candidates",
      "outputs": [
        {
```

```
    "name": "id",
    "type": "uint256"
  },
  {
    "name": "name",
    "type": "string"
  },
  {
    "name": "vote Count",
    "type": "uint256"
  }
],
"payable": false,
"stateMutability": "view",
"type": "function"
},
{
  "constant": true,
  "inputs": [],
  "name": "votersCount",
  "outputs": [
    {
      "name": "",
      "type": "uint256"
    }
  ],
  "payable": false,
  "stateMutability": "view",
  "type": "function"
}
```

```
},
{
  "constant": true,
  "inputs": [
    {
      "name": "",
      "type": "address"
    }
  ],
  "name": "voters",
  "outputs": [
    {
      "name": "",
      "type": "bool"
    }
  ],
  "payable": false,
  "stateMutability": "view",
  "type": "function"
},
{
  "inputs": [],
  "payable": false,
  "stateMutability": "nonpayable",
  "type": "constructor"
},
{
  "anonymous": false,
  "inputs": [
```

```
{
  "indexed": true,
  "name": "_candidateId",
  "type": "uint256"
},
{
  "name": "votedEvent",
  "type": "event"
},
{
  "constant": false,
  "inputs": [
    {
      "name": "_name",
      "type": "string"
    }
  ],
  "name": "addCandidate",
  "outputs": [],
  "payable": false,
  "stateMutability": "nonpayable",
  "type": "function"
},
{
  "constant": false,
  "inputs": [
    {
      "name": "_candidateId",
      "type": "uint256"
```

[illegible]

[illegible]



```
"sourceMap": "25:1814:0:-;;;522:590;8:9:-
1;5:2;;;30:1;27;20:12;5:2;522:590:0;554:27;;;;;;;;;;;;12;;;27;;;;i;:-
;591;;;;;;;;;;;;12;;;27;;;;i;:-;628;;;;;;;;;;;;12;;;27;;;;i;:-;665;;;;;;;;;;;;12;;;27;;;;i;:-
;702;;;;;;;;;;;;12;;;27;;;;i;:-;739;;;;;;;;;;;;12;;;27;;;;i;:-;776;;;;;;;;;;;;12;;;27;;;;i;:-
;813;;;;;;;;;;;;12;;;27;;;;i;:-;850;;;;;;;;;;;;12;;;27;;;;i;:-;887:28;;;;;;;;;;;;12;;;28;;;;i;:-
;925;;;;;;;;;;;;12;;;28;;;;i;:-;963;;;;;;;;;;;;12;;;28;;;;i;:-;1001;;;;;;;;;;;;12;;;28;;;;i;:-
;1039;;;;;;;;;;;;12;;;28;;;;i;:-;1077;;;;;;;;;;;;12;;;28;;;;i;:-
;25:1814;;1118:162;1179:15;;;18;;;;;;;;;;;;1237:36;;;;;;;;1247:15;1237:36;;;1264:5;1237:36;;;1271:1;12
37:36;;;1207:10;27;1218:15;;1207:27;;;;;;;;66;;;;;;;;;;;;i;:-;;;;;;;;1118:162;;;o;25:1814:-
;;;;;;;;;;;;i;:-;;;o;:-;;;;;;;;o;:-
....."
      ]
    }
  }
}
```





```
record that voter has voted\n    voters[msg.sender] = true;\n    votersCount++;\n\n    // update  
candidate vote Count\n    candidates[_candidateId].voteCount ++;\n\n    // trigger voted event\nemit votedEvent(_candidateId);\n  }\n}",
```

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

```
"ast": {
```

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

```
"exportedSymbols": {
```

```
"Election": [
```

```
154
```

```
]
```

```
},
```

```
"id": 155,
```

```
"nodeType": "SourceUnit",
```

```
"nodes": [
```

```
{
```

```
"id": 1,
```

```
"literals": [
```

```
"solidity",
```

```
"^",
```

```
"0.5",
```

```
".0"
```

```
],
```

```
"nodeType": "PragmaDirective",
```

```
"src": "0:23:0"
```

```
},
```

```
{
```

```
"baseContracts": [],
```

```
"contractDependencies": [],
```

```
"contractKind": "contract",
```

```
"documentation": null,
"fullyImplemented": true,
"id": 154,
"linearizedBaseContracts": [
  154
],
"name": "Election",
"nodeType": "ContractDefinition",
"nodes": [
  {
    "canonicalName": "Election.Candidate",
    "id": 8,
    "members": [
      {
        "constant": false,
        "id": 3,
        "name": "id",
        "nodeType": "VariableDeclaration",
        "scope": 8,
        "src": "101:7:0",
        "stateVariable": false,
        "storageLocation": "default",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
        },
      },
    ],
    "typeName": {
      "id": 2,
      "name": "uint",
```

```
"nodeType": "ElementaryTypeName",
"src": "101:4:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"value": null,
"visibility": "internal"
},
{
  "constant": false,
  "id": 5,
  "name": "name",
  "nodeType": "VariableDeclaration",
  "scope": 8,
  "src": "118:11:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_string_storage_ptr",
    "typeString": "string"
  },
  "typeName": {
    "id": 4,
    "name": "string",
    "nodeType": "ElementaryTypeName",
    "src": "118:6:0",
    "typeDescriptions": {
```

```
    "typeIdentifier": "t_string_storage_ptr",
    "typeString": "string"
  }
},
"value": null,
"visibility": "internal"
},
{
  "constant": false,
  "id": 7,
  "name": "voteCount",
  "nodeType": "VariableDeclaration",
  "scope": 8,
  "src": "139:14:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
    "id": 6,
    "name": "uint",
    "nodeType": "ElementaryTypeName",
    "src": "139:4:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  }
}
```

```
    },
    "value": null,
    "visibility": "internal"
  }
],
"name": "Candidate",
"nodeType": "StructDefinition",
"scope": 154,
"src": "74:86:0",
"visibility": "public"
},
{
  "constant": false,
  "id": 12,
  "name": "voters",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "204:38:0",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
    "typeString": "mapping(address => bool)"
  },
  "typeName": {
    "id": 11,
    "keyType": {
      "id": 9,
      "name": "address",
```

```
"nodeType": "ElementaryTypeName",
"src": "212:7:0",
"typeDescriptions": {
  "typeIdentifier": "t_address",
  "typeString": "address"
}
},
"nodeType": "Mapping",
"src": "204:24:0",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
  "typeString": "mapping(address => bool)"
},
"valueType": {
  "id": 10,
  "name": "bool",
  "nodeType": "ElementaryTypeName",
  "src": "223:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
  }
}
},
"value": null,
"visibility": "public"
},
{
  "constant": false,
```

```
"id": 16,
"name": "candidates",
"nodeType": "VariableDeclaration",
"scope": 154,
"src": "295:44:0",
"stateVariable": true,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
  "typeString": "mapping(uint256 => struct Election.Candidate)"
},
"typeName": {
  "id": 15,
  "keyType": {
    "id": 13,
    "name": "uint",
    "nodeType": "ElementaryTypeName",
    "src": "303:4:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
},
"nodeType": "Mapping",
"src": "295:26:0",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
  "typeString": "mapping(uint256 => struct Election.Candidate)"
},
```



```
"valueType": {
  "contractScope": null,
  "id": 14,
  "name": "Candidate",
  "nodeType": "UserDefinedTypeName",
  "referencedDeclaration": 8,
  "src": "311:9:0",
  "typeDescriptions": {
    "typeIdentifier": "t_struct$_Candidate_$8_storage_ptr",
    "typeString": "struct Election.Candidate"
  }
},
"value": null,
"visibility": "public"
},
{
  "constant": false,
  "id": 18,
  "name": "candidatesCount",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "375:27:0",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
}
```

```
"typeName": {
  "id": 17,
  "name": "uint",
  "nodeType": "ElementaryTypeName",
  "src": "375:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"value": null,
"visibility": "public"
},
{
  "constant": false,
  "id": 20,
  "name": "votersCount",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "408:23:0",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
    "id": 19,
    "name": "uint",
```

```
"nodeType": "ElementaryTypeName",
"src": "408:4:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"value": null,
"visibility": "public"
},
{
  "anonymous": false,
  "documentation": null,
  "id": 24,
  "name": "votedEvent",
  "nodeType": "EventDefinition",
  "parameters": {
    "id": 23,
    "nodeType": "ParameterList",
    "parameters": [
      {
        "constant": false,
        "id": 22,
        "indexed": true,
        "name": "_candidateId",
        "nodeType": "VariableDeclaration",
        "scope": 24,
        "src": "484:25:0",
        "stateVariable": false,
```

```
    "storageLocation": "default",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    },
    "typeName": {
      "id": 21,
      "name": "uint",
      "nodeType": "ElementaryTypeName",
      "src": "484:4:0",
      "typeDescriptions": {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
      }
    },
    "value": null,
    "visibility": "internal"
  }
],
"src": "474:41:0"
},
"src": "457:59:0"
},
{
  "body": {
    "id": 87,
    "nodeType": "Block",
    "src": "544:568:0",
    "statements": [
```

```

{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652031",
        "id": 28,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "567:13:0",
        "subdenomination": null,
        "typeDescriptions": {
          "typeIdentifier":
"t_stringliteral_41f9dcbd43e9b33194759b5a51b1df9864cdc2b2138ff106f03091eb79861f0c",
          "typeString": "literal_string \"Candidate 1\""
        },
        "value": "Candidate 1"
      }
    ],
    "expression": {
      "argumentTypes": [
        {
          "typeIdentifier":
"t_stringliteral_41f9dcbd43e9b33194759b5a51b1df9864cdc2b2138ff106f03091eb79861f0c",

```

```

        "typeString": "literal_string \"Candidate 1\""
    }
],
    "id": 27,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "554:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
    "id": 29,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "554:27:0",
    "typeDescriptions": {
        "typeIdentifier": "t_tuple$__$",
        "typeString": "tuple()"
    }
},
    "id": 30,

```

```

    "nodeType": "ExpressionStatement",
    "src": "554:27:0"
  },
  {
    "expression": {
      "argumentTypes": null,
      "arguments": [
        {
          "argumentTypes": null,
          "hexValue": "43616e6469646174652032",
          "id": 32,
          "isConstant": false,
          "isLValue": false,
          "isPure": true,
          "kind": "string",
          "lValueRequested": false,
          "nodeType": "Literal",
          "src": "604:13:0",
          "subdenomination": null,
          "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_f1f17440f69835dafba5c9fd0e4caa6c780807a80f8d1745ec7af1408d6cca4a",
            "typeString": "literal_string \"Candidate 2\""
          },
          "value": "Candidate 2"
        }
      ],
      "expression": {
        "argumentTypes": [

```

```

    {
      "typeIdentifier":
        "t_stringliteral_f1f17440f69835dafba5c9fd0e4caa6c780807a80f8d1745ec7af1408d6cca4a",
      "typeString": "literal_string \"Candidate 2\""
    }
  ],
  "id": 31,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "591:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
  "id": 33,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "591:27:0",
  "typeDescriptions": {
    "typeIdentifier": "t_tuple$__$",
    "typeString": "tuple()"
  }
}

```



```

    }
  },
  "id": 34,
  "nodeType": "ExpressionStatement",
  "src": "591:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652033",
        "id": 36,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "IValueRequested": false,
        "nodeType": "Literal",
        "src": "641:13:0",
        "subdenomination": null,
        "typeDescriptions": {
          "typeIdentifier":
            "t_stringliteral_a8aeded82f6f4cfacfa479ad8228c6c3fad44ded07e33c87a6d754848e18955",
          "typeString": "literal_string \"Candidate 3\""
        },
        "value": "Candidate 3"
      }
    ]
  }
}

```

```

    ],
    "expression": {
      "argumentTypes": [
        {
          "typeIdentifier":
            "t_stringliteral_a8aeded82f6f4cfacfa479ad8228c6c3fad44ded07e33c87a6d754848e18955",
          "typeString": "literal_string \"Candidate 3\""
        }
      ],
      "id": 35,
      "name": "addCandidate",
      "nodeType": "Identifier",
      "overloadedDeclarations": [],
      "referencedDeclaration": 107,
      "src": "628:12:0",
      "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
      }
    },
    "id": 37,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "628:27:0",

```

```

    "typeDescriptions": {
      "typeIdentifier": "t_tuple$__$",
      "typeString": "tuple()"
    }
  },
  "id": 38,
  "nodeType": "ExpressionStatement",
  "src": "628:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652034",
        "id": 40,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "678:13:0",
        "subdenomination": null,
        "typeDescriptions": {
          "typeIdentifier":
            "t_stringliteral_e8c2996ab62fdb4cbf2434875cb612867b7b27cfb5de9ee49e608694ef348fc0",
          "typeString": "literal_string \"Candidate 4\""
        }
      }
    ]
  }
}

```

```

    },
    "value": "Candidate 4"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_e8c2996ab62fdb4cbf2434875cb612867b7b27cfb5de9ee49e608694ef348fc0",
      "typeString": "literal_string \"Candidate 4\""
    }
  ],
  "id": 39,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "665:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
"id": 41,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,

```

```
"names": [],
"nodeType": "FunctionCall",
"src": "665:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 42,
"nodeType": "ExpressionStatement",
"src": "665:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652035",
        "id": 44,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "715:13:0",
        "subdenomination": null,
        "typeDescriptions": {
```

```

        "typeIdentifier":
"t_stringliteral_6fc65e9191f7d41953b5baca59c048cb783012578be91474bf09c71e5008b879",
        "typeString": "literal_string \"Candidate 5\""
    },
    "value": "Candidate 5"
}
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_6fc65e9191f7d41953b5baca59c048cb783012578be91474bf09c71e5008b879",
            "typeString": "literal_string \"Candidate 5\""
        }
    ],
    "id": 43,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "702:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
"id": 45,
"isConstant": false,
"isLValue": false,

```

```
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "702:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 46,
"nodeType": "ExpressionStatement",
"src": "702:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652036",
        "id": 48,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
```

```
    "src": "752:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
        "t_stringliteral_07d323ddc98104805b45018792ae4823242ba6b50eae42a0e2a7eab8bc2d5e96",
      "typeString": "literal_string \"Candidate 6\""
    },
    "value": "Candidate 6"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
        "t_stringliteral_07d323ddc98104805b45018792ae4823242ba6b50eae42a0e2a7eab8bc2d5e96",
      "typeString": "literal_string \"Candidate 6\""
    }
  ],
  "id": 47,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "739:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
```



```
"id": 49,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "739:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 50,
"nodeType": "ExpressionStatement",
"src": "739:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652037",
        "id": 52,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
```

```

    "kind": "string",
    "IValueRequested": false,
    "nodeType": "Literal",
    "src": "789:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
        "t_stringliteral_f2bae4545bb3641ed09e263bdb63eb02b472d64afbc89763d428034952384641",
      "typeString": "literal_string \"Candidate 7\""
    },
    "value": "Candidate 7"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
        "t_stringliteral_f2bae4545bb3641ed09e263bdb63eb02b472d64afbc89763d428034952384641",
      "typeString": "literal_string \"Candidate 7\""
    }
  ],
  "id": 51,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "776:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",

```

```
        "typeString": "function (string memory)"
    }
},
    "id": 53,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "776:27:0",
    "typeDescriptions": {
        "typeIdentifier": "t_tuple$__$",
        "typeString": "tuple()"
    }
},
    "id": 54,
    "nodeType": "ExpressionStatement",
    "src": "776:27:0"
},
{
    "expression": {
        "argumentTypes": null,
        "arguments": [
            {
                "argumentTypes": null,
                "hexValue": "43616e6469646174652038",
                "id": 56,
```

```
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "lValueRequested": false,
    "nodeType": "Literal",
    "src": "826:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
"t_stringliteral_9c978a0a71d3d1e6d2b05f65cfbf687bd37ee9b72c64a0ba2a8e0cdb498ad15",
      "typeString": "literal_string \"Candidate 8\""
    },
    "value": "Candidate 8"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_9c978a0a71d3d1e6d2b05f65cfbf687bd37ee9b72c64a0ba2a8e0cdb498ad15",
      "typeString": "literal_string \"Candidate 8\""
    }
  ],
  "id": 55,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
```

```

    "src": "813:12:0",
    "typeDescriptions": {
      "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
      "typeString": "function (string memory)"
    }
  },
  "id": 57,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "813:27:0",
  "typeDescriptions": {
    "typeIdentifier": "t_tuple$__$",
    "typeString": "tuple()"
  }
},
"id": 58,
"nodeType": "ExpressionStatement",
"src": "813:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {

```

```
    "argumentTypes": null,
    "hexValue": "43616e6469646174652039",
    "id": 60,
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "lValueRequested": false,
    "nodeType": "Literal",
    "src": "863:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
"t_stringliteral_a0bb88d937e3af76d940d77a78c91ace927afe6f894ca287e48fc7e7212cd4c9",
      "typeString": "literal_string \"Candidate 9\""
    },
    "value": "Candidate 9"
  },
  "expression": {
    "argumentTypes": [
      {
        "typeIdentifier":
"t_stringliteral_a0bb88d937e3af76d940d77a78c91ace927afe6f894ca287e48fc7e7212cd4c9",
        "typeString": "literal_string \"Candidate 9\""
      }
    ],
    "id": 59,
    "name": "addCandidate",
```

```
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 107,
"src": "850:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
  "typeString": "function (string memory)"
}
},
"id": 61,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "850:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 62,
"nodeType": "ExpressionStatement",
"src": "850:27:0"
},
{
  "expression": {
```

```
"argumentTypes": null,
"arguments": [
  {
    "argumentTypes": null,
    "hexValue": "43616e646964617465203130",
    "id": 64,
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "IValueRequested": false,
    "nodeType": "Literal",
    "src": "900:14:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
"t_stringliteral_39483107b995c347ca3920f257a12648991c0dd4775d6e687d32eca144ea1884",
      "typeString": "literal_string \"Candidate 10\""
    },
    "value": "Candidate 10"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_39483107b995c347ca3920f257a12648991c0dd4775d6e687d32eca144ea1884",
      "typeString": "literal_string \"Candidate 10\""
    }
  ]
}
```



```
    ],  
    "id": 63,  
    "name": "addCandidate",  
    "nodeType": "Identifier",  
    "overloadedDeclarations": [],  
    "referencedDeclaration": 107,  
    "src": "887:12:0",  
    "typeDescriptions": {  
      "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",  
      "typeString": "function (string memory)"  
    }  
  },  
  "id": 65,  
  "isConstant": false,  
  "isLValue": false,  
  "isPure": false,  
  "kind": "functionCall",  
  "lValueRequested": false,  
  "names": [],  
  "nodeType": "FunctionCall",  
  "src": "887:28:0",  
  "typeDescriptions": {  
    "typeIdentifier": "t_tuple$__$",  
    "typeString": "tuple()"  
  }  
},  
"id": 66,  
"nodeType": "ExpressionStatement",  
"src": "887:28:0"
```

```

    },
    {
      "expression": {
        "argumentTypes": null,
        "arguments": [
          {
            "argumentTypes": null,
            "hexValue": "43616e646964617465203131",
            "id": 68,
            "isConstant": false,
            "isLValue": false,
            "isPure": true,
            "kind": "string",
            "IValueRequested": false,
            "nodeType": "Literal",
            "src": "938:14:0",
            "subdenomination": null,
            "typeDescriptions": {
              "typeIdentifier":
"t_stringliteral_8c3eb7d5dc52583d29eea63a771575cf3a99fac866954493460458ad2401caff",
              "typeString": "literal_string \"Candidate 11\""
            },
            "value": "Candidate 11"
          }
        ],
        "expression": {
          "argumentTypes": [
            {

```

```
      "typeIdentifier":
"t_stringliteral_8c3eb7d5dc52583d29eea63a771575cf3a99fac866954493460458ad2401caff",
      "typeString": "literal_string \"Candidate 11\""
    }
  ],
  "id": 67,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "925:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
  "id": 69,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "925:28:0",
  "typeDescriptions": {
    "typeIdentifier": "t_tuple$__$",
    "typeString": "tuple()"
  }
}
```

```

    },
    "id": 70,
    "nodeType": "ExpressionStatement",
    "src": "925:28:0"
  },
  {
    "expression": {
      "argumentTypes": null,
      "arguments": [
        {
          "argumentTypes": null,
          "hexValue": "43616e646964617465203132",
          "id": 72,
          "isConstant": false,
          "isLValue": false,
          "isPure": true,
          "kind": "string",
          "lValueRequested": false,
          "nodeType": "Literal",
          "src": "976:14:0",
          "subdenomination": null,
          "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_66d17f9cdfc7a9a97d6d51b5414a131756abe51e21e9679ef660c617fece99b7",
            "typeString": "literal_string \"Candidate 12\""
          },
          "value": "Candidate 12"
        }
      ],

```

```
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_66d17f9cdfc7a9a97d6d51b5414a131756abe51e21e9679ef660c617fece99b7",
      "typeString": "literal_string \"Candidate 12\""
    }
  ],
  "id": 71,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "963:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
"id": 73,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "963:28:0",
"typeDescriptions": {
```

```

        "typeIdentifier": "t_tuple$__$",
        "typeString": "tuple()"
    }
},
"id": 74,
"nodeType": "ExpressionStatement",
"src": "963:28:0"
},
{
    "expression": {
        "argumentTypes": null,
        "arguments": [
            {
                "argumentTypes": null,
                "hexValue": "43616e646964617465203133",
                "id": 76,
                "isConstant": false,
                "isLValue": false,
                "isPure": true,
                "kind": "string",
                "lValueRequested": false,
                "nodeType": "Literal",
                "src": "1014:14:0",
                "subdenomination": null,
                "typeDescriptions": {
                    "typeIdentifier":
"t_stringliteral_c60b834235d3a3b6cd493919cfb0277453589ec8303287a41db51e2c71d559d6",
                    "typeString": "literal_string \"Candidate 13\""
                }
            },

```

```
        "value": "Candidate 13"
    }
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_c60b834235d3a3b6cd493919cfb0277453589ec8303287a41db51e2c71d559d6",
            "typeString": "literal_string \"Candidate 13\""
        }
    ],
    "id": 75,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "1001:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
"id": 77,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"IValueRequested": false,
"names": [],
```

```
"nodeType": "FunctionCall",
"src": "1001:28:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 78,
"nodeType": "ExpressionStatement",
"src": "1001:28:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e646964617465203134",
        "id": 80,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "1052:14:0",
        "subdenomination": null,
        "typeDescriptions": {
```



```

        "typeIdentifier":
"t_stringliteral_7b8fd56c42b4fc08e0d35711e84107d5815bfa344c8a07ad59975acf04c0cf12",
        "typeString": "literal_string \"Candidate 14\""
    },
    "value": "Candidate 14"
}
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_7b8fd56c42b4fc08e0d35711e84107d5815bfa344c8a07ad59975acf04c0cf12",
            "typeString": "literal_string \"Candidate 14\""
        }
    ],
    "id": 79,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "1039:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
"id": 81,
"isConstant": false,
"isLValue": false,

```

```
"isPure": false,
"kind": "functionCall",
"!ValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "1039:28:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 82,
"nodeType": "ExpressionStatement",
"src": "1039:28:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e646964617465203135",
        "id": 84,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "!ValueRequested": false,
        "nodeType": "Literal",
```

```

        "src": "1090:14:0",
        "subdenomination": null,
        "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_574cf68e28b0080f9791ac99cffa2a0ef6fa1d69ac0c072652dbe4b920a0c6cb",
            "typeString": "literal_string \"Candidate 15\""
        },
        "value": "Candidate 15"
    }
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_574cf68e28b0080f9791ac99cffa2a0ef6fa1d69ac0c072652dbe4b920a0c6cb",
            "typeString": "literal_string \"Candidate 15\""
        }
    ],
    "id": 83,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "1077:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},

```

```
    "id": 85,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "1077:28:0",
    "typeDescriptions": {
      "typeIdentifier": "t_tuple$__$",
      "typeString": "tuple()"
    }
  },
  "id": 86,
  "nodeType": "ExpressionStatement",
  "src": "1077:28:0"
}
]
},
"documentation": null,
"id": 88,
"implemented": true,
"kind": "constructor",
"modifiers": [],
"name": "",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 25,
```

```
"nodeType": "ParameterList",
"parameters": [],
"src": "534:2:0"
},
"returnParameters": {
  "id": 26,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "544:0:0"
},
"scope": 154,
"src": "522:590:0",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 106,
    "nodeType": "Block",
    "src": "1169:111:0",
    "statements": [
      {
        "expression": {
          "argumentTypes": null,
          "id": 94,
          "isConstant": false,
          "isLValue": false,
          "isPure": false,
```

```
"IValueRequested": false,
"nodeType": "UnaryOperation",
"operator": "++",
"prefix": false,
"src": "1179:18:0",
"subExpression": {
  "argumentTypes": null,
  "id": 93,
  "name": "candidatesCount",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 18,
  "src": "1179:15:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"id": 95,
"nodeType": "ExpressionStatement",
"src": "1179:18:0"
},
{
  "expression": {
```

```
"argumentTypes": null,
"id": 104,
"isConstant": false,
"isLValue": false,
"isPure": false,
"lValueRequested": false,
"leftHandSide": {
  "argumentTypes": null,
  "baseExpression": {
    "argumentTypes": null,
    "id": 96,
    "name": "candidates",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 16,
    "src": "1207:10:0",
    "typeDescriptions": {
      "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
      "typeString": "mapping(uint256 => struct Election.Candidate storage ref)"
    }
  },
  "id": 98,
  "indexExpression": {
    "argumentTypes": null,
    "id": 97,
    "name": "candidatesCount",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 18,
```

```
"src": "1218:15:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"lValueRequested": true,
"nodeType": "IndexAccess",
"src": "1207:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_storage",
  "typeString": "struct Election.Candidate storage ref"
}
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "arguments": [
    {
      "argumentTypes": null,
      "id": 100,
      "name": "candidatesCount",
      "nodeType": "Identifier",
      "overloadedDeclarations": [],
      "referencedDeclaration": 18,
```



```
"src": "1247:15:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
{
  "argumentTypes": null,
  "id": 101,
  "name": "_name",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 90,
  "src": "1264:5:0",
  "typeDescriptions": {
    "typeIdentifier": "t_string_memory_ptr",
    "typeString": "string memory"
  },
},
{
  "argumentTypes": null,
  "hexValue": "30",
  "id": 102,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
  "kind": "number",
  "lValueRequested": false,
  "nodeType": "Literal",
```

```
"src": "1271:1:0",
"subdenomination": null,
"typeDescriptions": {
  "typeIdentifier": "t_rational_0_by_1",
  "typeString": "int_const 0"
},
"value": "0"
}
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    },
    {
      "typeIdentifier": "t_string_memory_ptr",
      "typeString": "string memory"
    },
    {
      "typeIdentifier": "t_rational_0_by_1",
      "typeString": "int_const 0"
    }
  ],
  "id": 99,
  "name": "Candidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 8,
```

```
"src": "1237:9:0",
"typeDescriptions": {
  "typeIdentifier": "t_type$_t_struct$_Candidate_$8_storage_ptr_$",
  "typeString": "type(struct Election.Candidate storage pointer)"
}
},
"id": 103,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "structConstructorCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "1237:36:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_memory",
  "typeString": "struct Election.Candidate memory"
}
},
"src": "1207:66:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_storage",
  "typeString": "struct Election.Candidate storage ref"
}
},
"id": 105,
"nodeType": "ExpressionStatement",
"src": "1207:66:0"
```

```
    }
  ]
},
"documentation": null,
"id": 107,
"implemented": true,
"kind": "function",
"modifiers": [],
"name": "addCandidate",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 91,
  "nodeType": "ParameterList",
  "parameters": [
    {
      "constant": false,
      "id": 90,
      "name": "_name",
      "nodeType": "VariableDeclaration",
      "scope": 107,
      "src": "1141:19:0",
      "stateVariable": false,
      "storageLocation": "memory",
      "typeDescriptions": {
        "typeIdentifier": "t_string_memory_ptr",
        "typeString": "string"
      },
    },
  ],
  "typeName": {
    "id": 89,
```

```
    "name": "string",
    "nodeType": "ElementaryTypeName",
    "src": "1141:6:0",
    "typeDescriptions": {
      "typeIdentifier": "t_string_storage_ptr",
      "typeString": "string"
    }
  },
  "value": null,
  "visibility": "internal"
}
],
"src": "1140:21:0"
},
"returnParameters": {
  "id": 92,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "1169:0:0"
},
"scope": 154,
"src": "1118:162:0",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 152,
```

```
"nodeType": "Block",
"src": "1327:510:0",
"statements": [
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "id": 117,
        "isConstant": false,
        "isLValue": false,
        "isPure": false,
        "lValueRequested": false,
        "nodeType": "UnaryOperation",
        "operator": "!",
        "prefix": true,
        "src": "1395:19:0",
        "subExpression": {
          "argumentTypes": null,
          "baseExpression": {
            "argumentTypes": null,
            "id": 113,
            "name": "voters",
            "nodeType": "Identifier",
            "overloadedDeclarations": [],
            "referencedDeclaration": 12,
            "src": "1396:6:0",
            "typeDescriptions": {
```

```
    "typeIdentifier": "t_mapping$t_address_$t_bool_$",
    "typeString": "mapping(address => bool)"
  }
},
"id": 116,
"indexExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 114,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 226,
    "src": "1403:3:0",
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
      "typeString": "msg"
    }
  },
},
"id": 115,
"isConstant": false,
"isLValue": false,
"isPure": false,
"IValueRequested": false,
"memberName": "sender",
"nodeType": "MemberAccess",
"referencedDeclaration": null,
"src": "1403:10:0",
```

```
    "typeDescriptions": {
      "typeIdentifier": "t_address_payable",
      "typeString": "address payable"
    }
  },
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "IValueRequested": false,
  "nodeType": "IndexAccess",
  "src": "1396:18:0",
  "typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
  }
},
{
  "typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
  }
},
{
  "argumentTypes": null,
  "hexValue": "796f75206861766520616c726556164792076667465564",
  "id": 118,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
  "kind": "string",
```



```

        "IValueRequested": false,
        "nodeType": "Literal",
        "src": "1415:24:0",
        "subdenomination": null,
        "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_4c343741a23ec597e6e0860f12af81ec477bee9818ba412eac24c75c33aaff0d",
            "typeString": "literal_string \"you have already voted\""
        },
        "value": "you have already voted"
    }
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier": "t_bool",
            "typeString": "bool"
        },
        {
            "typeIdentifier":
"t_stringliteral_4c343741a23ec597e6e0860f12af81ec477bee9818ba412eac24c75c33aaff0d",
            "typeString": "literal_string \"you have already voted\""
        }
    ],
    "id": 112,
    "name": "require",
    "nodeType": "Identifier",
    "overloadedDeclarations": [
        229,

```

```

    230
  ],
  "referencedDeclaration": 230,
  "src": "1387:7:0",
  "typeDescriptions": {
    "typeIdentifier":
      "t_function_require_pure$_t_bool_$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (bool,string memory) pure"
  }
},
"id": 119,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "1387:53:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 120,
"nodeType": "ExpressionStatement",
"src": "1387:53:0"
},
{

```

```
"expression": {
  "argumentTypes": null,
  "arguments": [
    {
      "argumentTypes": null,
      "commonType": {
        "typeIdentifier": "t_bool",
        "typeString": "bool"
      },
      "id": 128,
      "isConstant": false,
      "isLValue": false,
      "isPure": false,
      "IValueRequested": false,
      "leftExpression": {
        "argumentTypes": null,
        "commonType": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
        },
        "id": 124,
        "isConstant": false,
        "isLValue": false,
        "isPure": false,
        "IValueRequested": false,
        "leftExpression": {
          "argumentTypes": null,
          "id": 122,
          "name": "_candidateId",
```

```
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 109,
"src": "1496:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"nodeType": "BinaryOperation",
"operator": ">",
"rightExpression": {
  "argumentTypes": null,
  "hexValue": "30",
  "id": 123,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
  "kind": "number",
  "IValueRequested": false,
  "nodeType": "Literal",
  "src": "1511:1:0",
  "subdenomination": null,
  "typeDescriptions": {
    "typeIdentifier": "t_rational_0_by_1",
    "typeString": "int_const 0"
  },
  "value": "0"
},
```

```
"src": "1496:16:0",
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
},
"nodeType": "BinaryOperation",
"operator": "&&",
"rightExpression": {
  "argumentTypes": null,
  "commonType": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "id": 127,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "IValueRequested": false,
  "leftExpression": {
    "argumentTypes": null,
    "id": 125,
    "name": "_candidateId",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 109,
    "src": "1516:12:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
```

```
        "typeString": "uint256"
    }
},
"nodeType": "BinaryOperation",
"operator": "<=",
"rightExpression": {
    "argumentTypes": null,
    "id": 126,
    "name": "candidatesCount",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 18,
    "src": "1532:15:0",
    "typeDescriptions": {
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
    }
},
"src": "1516:31:0",
"typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
}
},
"src": "1496:51:0",
"typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
}
```

```

    },
    {
      "argumentTypes": null,
      "hexValue": "63616e64696461746520646f77736e2774206578697374",
      "id": 129,
      "isConstant": false,
      "isLValue": false,
      "isPure": true,
      "kind": "string",
      "lValueRequested": false,
      "nodeType": "Literal",
      "src": "1548:25:0",
      "subdenomination": null,
      "typeDescriptions": {
        "typeIdentifier":
"t_stringliteral_cf5d1abfeb023c4d82d9ffa9641a235531a9b7934122b0cd81987b4cc40f6b65",
        "typeString": "literal_string \"candidate doesn't exist\""
      },
      "value": "candidate doesn't exist"
    }
  ],
  "expression": {
    "argumentTypes": [
      {
        "typeIdentifier": "t_bool",
        "typeString": "bool"
      },
    ],
    {

```

```

      "typeIdentifier":
"t_stringliteral_cf5d1abfeb023c4d82d9ffa9641a235531a9b7934122b0cd81987b4cc40f6b65",
      "typeString": "literal_string \"candidate doesn't exist\""
    }
  ],
  "id": 121,
  "name": "require",
  "nodeType": "Identifier",
  "overloadedDeclarations": [
    229,
    230
  ],
  "referencedDeclaration": 230,
  "src": "1488:7:0",
  "typeDescriptions": {
    "typeIdentifier":
"t_function_require_pure$_t_bool_$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (bool,string memory) pure"
  }
},
  "id": 130,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "1488:86:0",

```



```
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
},
},
"id": 131,
"nodeType": "ExpressionStatement",
"src": "1488:86:0"
},
{
  "expression": {
    "argumentTypes": null,
    "id": 137,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
    "leftHandSide": {
      "argumentTypes": null,
      "baseExpression": {
        "argumentTypes": null,
        "id": 132,
        "name": "voters",
        "nodeType": "Identifier",
        "overloadedDeclarations": [],
        "referencedDeclaration": 12,
        "src": "1624:6:0",
        "typeDescriptions": {
          "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
```

```
    "typeString": "mapping(address => bool)"
  }
},
"id": 135,
"indexExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 133,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 226,
    "src": "1631:3:0",
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
      "typeString": "msg"
    }
  }
},
"id": 134,
"isConstant": false,
"isLValue": false,
"isPure": false,
"IValueRequested": false,
"memberName": "sender",
"nodeType": "MemberAccess",
"referencedDeclaration": null,
"src": "1631:10:0",
"typeDescriptions": {
```

```
    "typeIdentifier": "t_address_payable",
    "typeString": "address payable"
  }
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"lValueRequested": true,
"nodeType": "IndexAccess",
"src": "1624:18:0",
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "hexValue": "74727565",
  "id": 136,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
  "kind": "bool",
  "lValueRequested": false,
  "nodeType": "Literal",
  "src": "1645:4:0",
  "subdenomination": null,
```

```
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
},
"value": "true"
},
"src": "1624:25:0",
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
},
"id": 138,
"nodeType": "ExpressionStatement",
"src": "1624:25:0"
},
{
  "expression": {
    "argumentTypes": null,
    "id": 140,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
    "nodeType": "UnaryOperation",
    "operator": "++",
    "prefix": false,
    "src": "1659:13:0",
    "subExpression": {
```

```
    "argumentTypes": null,
    "id": 139,
    "name": "votersCount",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 20,
    "src": "1659:11:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"src": "1659:13:0"
},
{
  "expression": {
    "argumentTypes": null,
    "id": 146,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "IValueRequested": false,
```

```
"nodeType": "UnaryOperation",
"operator": "++",
"prefix": false,
"src": "1722:37:0",
"subExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "baseExpression": {
      "argumentTypes": null,
      "id": 142,
      "name": "candidates",
      "nodeType": "Identifier",
      "overloadedDeclarations": [],
      "referencedDeclaration": 16,
      "src": "1722:10:0",
      "typeDescriptions": {
        "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
        "typeString": "mapping(uint256 => struct Election.Candidate storage ref)"
      }
    },
  },
  "id": 144,
  "indexExpression": {
    "argumentTypes": null,
    "id": 143,
    "name": "_candidateId",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 109,
```

```
"src": "1733:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": false,
"nodeType": "IndexAccess",
"src": "1722:24:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_storage",
  "typeString": "struct Election.Candidate storage ref"
}
},
"id": 145,
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": true,
"memberName": "voteCount",
"nodeType": "MemberAccess",
"referencedDeclaration": 7,
"src": "1722:34:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
```

```
    }
  },
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"id": 147,
"nodeType": "ExpressionStatement",
"src": "1722:37:0"
},
{
  "eventCall": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "id": 149,
        "name": "_candidateId",
        "nodeType": "Identifier",
        "overloadedDeclarations": [],
        "referencedDeclaration": 109,
        "src": "1817:12:0",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
        }
      }
    ]
  }
},
```



```
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  ],
  "id": 148,
  "name": "votedEvent",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 24,
  "src": "1806:10:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_event_nonpayable$_t_uint256_$returns$__$",
    "typeString": "function (uint256)"
  }
},
"id": 150,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "1806:24:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
```

```
        "typeString": "tuple()"
      }
    },
    "id": 151,
    "nodeType": "EmitStatement",
    "src": "1801:29:0"
  }
]
},
"documentation": null,
"id": 153,
"implemented": true,
"kind": "function",
"modifiers": [],
"name": "vote",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 110,
  "nodeType": "ParameterList",
  "parameters": [
    {
      "constant": false,
      "id": 109,
      "name": "_candidateId",
      "nodeType": "VariableDeclaration",
      "scope": 153,
      "src": "1301:17:0",
      "stateVariable": false,
      "storageLocation": "default",
```

```
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"typeName": {
  "id": 108,
  "name": "uint",
  "nodeType": "ElementaryTypeName",
  "src": "1301:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"value": null,
"visibility": "internal"
}
],
"src": "1300:19:0"
},
"returnParameters": {
  "id": 111,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "1327:0:0"
},
"scope": 154,
"src": "1286:551:0",
"stateMutability": "nonpayable",
```

```
    "superFunction": null,
    "visibility": "public"
  }
],
"scope": 155,
"src": "25:1814:0"
}
],
"src": "0:1839:0"
},
"legacyAST": {
  "absolutePath": "/home/kapoor13/Desktop/lasttry/contracts/Election.sol",
  "exportedSymbols": {
    "Election": [
      154
    ]
  },
  "id": 155,
  "nodeType": "SourceUnit",
  "nodes": [
    {
      "id": 1,
      "literals": [
        "solidity",
        "^",
        "0.5",
        ".0"
      ],
      "nodeType": "PragmaDirective",
```

```
"src": "0:23:0"
},
{
  "baseContracts": [],
  "contractDependencies": [],
  "contractKind": "contract",
  "documentation": null,
  "fullyImplemented": true,
  "id": 154,
  "linearizedBaseContracts": [
    154
  ],
  "name": "Election",
  "nodeType": "ContractDefinition",
  "nodes": [
    {
      "canonicalName": "Election.Candidate",
      "id": 8,
      "members": [
        {
          "constant": false,
          "id": 3,
          "name": "id",
          "nodeType": "VariableDeclaration",
          "scope": 8,
          "src": "101:7:0",
          "stateVariable": false,
          "storageLocation": "default",
          "typeDescriptions": {
```

```
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
    "id": 2,
    "name": "uint",
    "nodeType": "ElementaryTypeName",
    "src": "101:4:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
  "value": null,
  "visibility": "internal"
},
{
  "constant": false,
  "id": 5,
  "name": "name",
  "nodeType": "VariableDeclaration",
  "scope": 8,
  "src": "118:11:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_string_storage_ptr",
    "typeString": "string"
  },
}
```

```
"typeName": {
  "id": 4,
  "name": "string",
  "nodeType": "ElementaryTypeName",
  "src": "118:6:0",
  "typeDescriptions": {
    "typeIdentifier": "t_string_storage_ptr",
    "typeString": "string"
  }
},
"value": null,
"visibility": "internal"
},
{
  "constant": false,
  "id": 7,
  "name": "voteCount",
  "nodeType": "VariableDeclaration",
  "scope": 8,
  "src": "139:14:0",
  "stateVariable": false,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
    "id": 6,
    "name": "uint",
```

```
    "nodeType": "ElementaryTypeName",
    "src": "139:4:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
  "value": null,
  "visibility": "internal"
}
],
"name": "Candidate",
"nodeType": "StructDefinition",
"scope": 154,
"src": "74:86:0",
"visibility": "public"
},
{
  "constant": false,
  "id": 12,
  "name": "voters",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "204:38:0",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
    "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
    "typeString": "mapping(address => bool)"
  }
}
```



```
},
"typeName": {
  "id": 11,
  "keyType": {
    "id": 9,
    "name": "address",
    "nodeType": "ElementaryTypeName",
    "src": "212:7:0",
    "typeDescriptions": {
      "typeIdentifier": "t_address",
      "typeString": "address"
    }
  },
},
"nodeType": "Mapping",
"src": "204:24:0",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
  "typeString": "mapping(address => bool)"
},
"valueType": {
  "id": 10,
  "name": "bool",
  "nodeType": "ElementaryTypeName",
  "src": "223:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
  }
}
```

```
    },
    "value": null,
    "visibility": "public"
  },
  {
    "constant": false,
    "id": 16,
    "name": "candidates",
    "nodeType": "VariableDeclaration",
    "scope": 154,
    "src": "295:44:0",
    "stateVariable": true,
    "storageLocation": "default",
    "typeDescriptions": {
      "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
      "typeString": "mapping(uint256 => struct Election.Candidate)"
    },
    "typeName": {
      "id": 15,
      "keyType": {
        "id": 13,
        "name": "uint",
        "nodeType": "ElementaryTypeName",
        "src": "303:4:0",
        "typeDescriptions": {
          "typeIdentifier": "t_uint256",
          "typeString": "uint256"
        }
      },
    },
  },
```

```
"nodeType": "Mapping",
"src": "295:26:0",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_uint256$_t_struct$_Candidate_$8_storage_$",
  "typeString": "mapping(uint256 => struct Election.Candidate)"
},
"valueType": {
  "contractScope": null,
  "id": 14,
  "name": "Candidate",
  "nodeType": "UserDefinedTypeName",
  "referencedDeclaration": 8,
  "src": "311:9:0",
  "typeDescriptions": {
    "typeIdentifier": "t_struct$_Candidate_$8_storage_ptr",
    "typeString": "struct Election.Candidate"
  }
}
},
"value": null,
"visibility": "public"
},
{
  "constant": false,
  "id": 18,
  "name": "candidatesCount",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "375:27:0",
```

```
"stateVariable": true,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"typeName": {
  "id": 17,
  "name": "uint",
  "nodeType": "ElementaryTypeName",
  "src": "375:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"value": null,
"visibility": "public"
},
{
  "constant": false,
  "id": 20,
  "name": "votersCount",
  "nodeType": "VariableDeclaration",
  "scope": 154,
  "src": "408:23:0",
  "stateVariable": true,
  "storageLocation": "default",
  "typeDescriptions": {
```

```
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "typeName": {
    "id": 19,
    "name": "uint",
    "nodeType": "ElementaryTypeName",
    "src": "408:4:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
  "value": null,
  "visibility": "public"
},
{
  "anonymous": false,
  "documentation": null,
  "id": 24,
  "name": "votedEvent",
  "nodeType": "EventDefinition",
  "parameters": {
    "id": 23,
    "nodeType": "ParameterList",
    "parameters": [
      {
        "constant": false,
        "id": 22,
```

```
"indexed": true,
"name": "_candidateId",
"nodeType": "VariableDeclaration",
"scope": 24,
"src": "484:25:0",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"typeName": {
  "id": 21,
  "name": "uint",
  "nodeType": "ElementaryTypeName",
  "src": "484:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"value": null,
"visibility": "internal"
}
],
"src": "474:41:0"
},
"src": "457:59:0"
},
```

```
{
  "body": {
    "id": 87,
    "nodeType": "Block",
    "src": "544:568:0",
    "statements": [
      {
        "expression": {
          "argumentTypes": null,
          "arguments": [
            {
              "argumentTypes": null,
              "hexValue": "43616e6469646174652031",
              "id": 28,
              "isConstant": false,
              "isLValue": false,
              "isPure": true,
              "kind": "string",
              "IValueRequested": false,
              "nodeType": "Literal",
              "src": "567:13:0",
              "subdenomination": null,
              "typeDescriptions": {
                "typeIdentifier":
"t_stringliteral_41f9dcbd43e9b33194759b5a51b1df9864cdc2b2138ff106f03091eb79861f0c",
                "typeString": "literal_string \"Candidate 1\""
              },
              "value": "Candidate 1"
            }
          ]
        }
      }
    ]
  }
}
```

```

    ],
    "expression": {
      "argumentTypes": [
        {
          "typeIdentifier":
            "t_stringliteral_41f9dcbd43e9b33194759b5a51b1df9864cdc2b2138ff106f03091eb79861f0c",
          "typeString": "literal_string \"Candidate 1\""
        }
      ],
      "id": 27,
      "name": "addCandidate",
      "nodeType": "Identifier",
      "overloadedDeclarations": [],
      "referencedDeclaration": 107,
      "src": "554:12:0",
      "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
      }
    },
    "id": 29,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "554:27:0",

```



```

    "typeDescriptions": {
      "typeIdentifier": "t_tuple$__$",
      "typeString": "tuple()"
    }
  },
  "id": 30,
  "nodeType": "ExpressionStatement",
  "src": "554:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652032",
        "id": 32,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "604:13:0",
        "subdenomination": null,
        "typeDescriptions": {
          "typeIdentifier":
            "t_stringliteral_f1f17440f69835dafba5c9fd0e4caa6c780807a80f8d1745ec7af1408d6cca4a",
          "typeString": "literal_string \"Candidate 2\""
        }
      }
    ]
  }
}

```

```

    },
    "value": "Candidate 2"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_f1f17440f69835dafba5c9fd0e4caa6c780807a80f8d1745ec7af1408d6cca4a",
      "typeString": "literal_string \"Candidate 2\""
    }
  ],
  "id": 31,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "591:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
"id": 33,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,

```

```
"names": [],
"nodeType": "FunctionCall",
"src": "591:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 34,
"nodeType": "ExpressionStatement",
"src": "591:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652033",
        "id": 36,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "641:13:0",
        "subdenomination": null,
        "typeDescriptions": {
```

```

        "typeIdentifier":
"t_stringliteral_a8aeded82f6f4cfacfa479ad8228c6c3fad44ded07e33c87a6d754848e18955",
        "typeString": "literal_string \"Candidate 3\""
    },
    "value": "Candidate 3"
}
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_a8aeded82f6f4cfacfa479ad8228c6c3fad44ded07e33c87a6d754848e18955",
            "typeString": "literal_string \"Candidate 3\""
        }
    ],
    "id": 35,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "628:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
"id": 37,
"isConstant": false,
"isLValue": false,

```

```
"isPure": false,
"kind": "functionCall",
"!ValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "628:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 38,
"nodeType": "ExpressionStatement",
"src": "628:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652034",
        "id": 40,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "!ValueRequested": false,
        "nodeType": "Literal",
```

```

        "src": "678:13:0",
        "subdenomination": null,
        "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_e8c2996ab62fdb4cbf2434875cb612867b7b27cfb5de9ee49e608694ef348fc0",
            "typeString": "literal_string \"Candidate 4\""
        },
        "value": "Candidate 4"
    }
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_e8c2996ab62fdb4cbf2434875cb612867b7b27cfb5de9ee49e608694ef348fc0",
            "typeString": "literal_string \"Candidate 4\""
        }
    ],
    "id": 39,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "665:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},

```

```
"id": 41,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "665:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 42,
"nodeType": "ExpressionStatement",
"src": "665:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e6469646174652035",
        "id": 44,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
```

```
    "kind": "string",
    "IValueRequested": false,
    "nodeType": "Literal",
    "src": "715:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
        "t_stringliteral_6fc65e9191f7d41953b5baca59c048cb783012578be91474bf09c71e5008b879",
      "typeString": "literal_string \"Candidate 5\""
    },
    "value": "Candidate 5"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
        "t_stringliteral_6fc65e9191f7d41953b5baca59c048cb783012578be91474bf09c71e5008b879",
      "typeString": "literal_string \"Candidate 5\""
    }
  ],
  "id": 43,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "702:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
```



```
    "typeString": "function (string memory)"
  }
},
"id": 45,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "702:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 46,
"nodeType": "ExpressionStatement",
"src": "702:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e64699646174652036",
        "id": 48,
```

```
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "lValueRequested": false,
    "nodeType": "Literal",
    "src": "752:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
"t_stringliteral_07d323ddc98104805b45018792ae4823242ba6b50eae42a0e2a7eab8bc2d5e96",
      "typeString": "literal_string \"Candidate 6\""
    },
    "value": "Candidate 6"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_07d323ddc98104805b45018792ae4823242ba6b50eae42a0e2a7eab8bc2d5e96",
      "typeString": "literal_string \"Candidate 6\""
    }
  ],
  "id": 47,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
```

```
"src": "739:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
  "typeString": "function (string memory)"
}
},
"id": 49,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "739:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 50,
"nodeType": "ExpressionStatement",
"src": "739:27:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
```

```

        "argumentTypes": null,
        "hexValue": "43616e6469646174652037",
        "id": 52,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "789:13:0",
        "subdenomination": null,
        "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_f2bae4545bb3641ed09e263bdb63eb02b472d64afbc89763d428034952384641",
            "typeString": "literal_string \"Candidate 7\""
        },
        "value": "Candidate 7"
    },
    "expression": {
        "argumentTypes": [
            {
                "typeIdentifier":
"t_stringliteral_f2bae4545bb3641ed09e263bdb63eb02b472d64afbc89763d428034952384641",
                "typeString": "literal_string \"Candidate 7\""
            }
        ],
        "id": 51,
        "name": "addCandidate",

```

```

    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "776:12:0",
    "typeDescriptions": {
      "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
      "typeString": "function (string memory)"
    }
  },
  "id": 53,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "776:27:0",
  "typeDescriptions": {
    "typeIdentifier": "t_tuple$__$",
    "typeString": "tuple()"
  }
},
"id": 54,
"nodeType": "ExpressionStatement",
"src": "776:27:0"
},
{
  "expression": {

```

```
"argumentTypes": null,
"arguments": [
  {
    "argumentTypes": null,
    "hexValue": "43616e6469646174652038",
    "id": 56,
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "IValueRequested": false,
    "nodeType": "Literal",
    "src": "826:13:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
"t_stringliteral_9c978a0a71d3d1e6d2b05f65cfbfe687bd37ee9b72c64a0ba2a8e0cdb498ad15",
      "typeString": "literal_string \"Candidate 8\""
    },
    "value": "Candidate 8"
  },
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_9c978a0a71d3d1e6d2b05f65cfbfe687bd37ee9b72c64a0ba2a8e0cdb498ad15",
      "typeString": "literal_string \"Candidate 8\""
    }
  ]
}
```

```
    ],  
    "id": 55,  
    "name": "addCandidate",  
    "nodeType": "Identifier",  
    "overloadedDeclarations": [],  
    "referencedDeclaration": 107,  
    "src": "813:12:0",  
    "typeDescriptions": {  
      "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",  
      "typeString": "function (string memory)"  
    }  
  },  
  "id": 57,  
  "isConstant": false,  
  "isLValue": false,  
  "isPure": false,  
  "kind": "functionCall",  
  "lValueRequested": false,  
  "names": [],  
  "nodeType": "FunctionCall",  
  "src": "813:27:0",  
  "typeDescriptions": {  
    "typeIdentifier": "t_tuple$__$",  
    "typeString": "tuple()"  
  }  
},  
"id": 58,  
"nodeType": "ExpressionStatement",  
"src": "813:27:0"
```

```

    },
    {
      "expression": {
        "argumentTypes": null,
        "arguments": [
          {
            "argumentTypes": null,
            "hexValue": "43616e6469646174652039",
            "id": 60,
            "isConstant": false,
            "isLValue": false,
            "isPure": true,
            "kind": "string",
            "IValueRequested": false,
            "nodeType": "Literal",
            "src": "863:13:0",
            "subdenomination": null,
            "typeDescriptions": {
              "typeIdentifier":
"t_stringliteral_a0bb88d937e3af76d940d77a78c91ace927afe6f894ca287e48fc7e7212cd4c9",
              "typeString": "literal_string \"Candidate 9\""
            },
            "value": "Candidate 9"
          }
        ],
        "expression": {
          "argumentTypes": [
            {

```



```

      "typeIdentifier":
"t_stringliteral_a0bb88d937e3af76d940d77a78c91ace927afe6f894ca287e48fc7e7212cd4c9",
      "typeString": "literal_string \"Candidate 9\""
    }
  ],
  "id": 59,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "850:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
  "id": 61,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "850:27:0",
  "typeDescriptions": {
    "typeIdentifier": "t_tuple$__$",
    "typeString": "tuple()"
  }
}

```

```

    },
    "id": 62,
    "nodeType": "ExpressionStatement",
    "src": "850:27:0"
  },
  {
    "expression": {
      "argumentTypes": null,
      "arguments": [
        {
          "argumentTypes": null,
          "hexValue": "43616e646964617465203130",
          "id": 64,
          "isConstant": false,
          "isLValue": false,
          "isPure": true,
          "kind": "string",
          "lValueRequested": false,
          "nodeType": "Literal",
          "src": "900:14:0",
          "subdenomination": null,
          "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_39483107b995c347ca3920f257a12648991c0dd4775d6e687d32eca144ea1884",
            "typeString": "literal_string \"Candidate 10\""
          },
          "value": "Candidate 10"
        }
      ],

```

```
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
"t_stringliteral_39483107b995c347ca3920f257a12648991c0dd4775d6e687d32eca144ea1884",
      "typeString": "literal_string \"Candidate 10\""
    }
  ],
  "id": 63,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "887:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (string memory)"
  }
},
"id": 65,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "887:28:0",
"typeDescriptions": {
```

```

        "typeIdentifier": "t_tuple$__$",
        "typeString": "tuple()"
    }
},
"id": 66,
"nodeType": "ExpressionStatement",
"src": "887:28:0"
},
{
    "expression": {
        "argumentTypes": null,
        "arguments": [
            {
                "argumentTypes": null,
                "hexValue": "43616e646964617465203131",
                "id": 68,
                "isConstant": false,
                "isLValue": false,
                "isPure": true,
                "kind": "string",
                "lValueRequested": false,
                "nodeType": "Literal",
                "src": "938:14:0",
                "subdenomination": null,
                "typeDescriptions": {
                    "typeIdentifier":
"t_stringliteral_8c3eb7d5dc52583d29eea63a771575cf3a99fac866954493460458ad2401caff",
                    "typeString": "literal_string \"Candidate 11\""
                }
            },

```

```

        "value": "Candidate 11"
    }
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_8c3eb7d5dc52583d29eea63a771575cf3a99fac866954493460458ad2401caff",
            "typeString": "literal_string \"Candidate 11\""
        }
    ],
    "id": 67,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "925:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
"id": 69,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"IValueRequested": false,
"names": [],

```

```
"nodeType": "FunctionCall",
"src": "925:28:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 70,
"nodeType": "ExpressionStatement",
"src": "925:28:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e646964617465203132",
        "id": 72,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "lValueRequested": false,
        "nodeType": "Literal",
        "src": "976:14:0",
        "subdenomination": null,
        "typeDescriptions": {
```

```

        "typeIdentifier":
"t_stringliteral_66d17f9cdfc7a9a97d6d51b5414a131756abe51e21e9679ef660c617fece99b7",
        "typeString": "literal_string \"Candidate 12\""
    },
    "value": "Candidate 12"
}
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_66d17f9cdfc7a9a97d6d51b5414a131756abe51e21e9679ef660c617fece99b7",
            "typeString": "literal_string \"Candidate 12\""
        }
    ],
    "id": 71,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "963:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},
    "id": 73,
    "isConstant": false,
    "isLValue": false,

```

```
"isPure": false,
"kind": "functionCall",
"!ValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "963:28:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 74,
"nodeType": "ExpressionStatement",
"src": "963:28:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e646964617465203133",
        "id": 76,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
        "kind": "string",
        "!ValueRequested": false,
        "nodeType": "Literal",
```



```

        "src": "1014:14:0",
        "subdenomination": null,
        "typeDescriptions": {
            "typeIdentifier":
"t_stringliteral_c60b834235d3a3b6cd493919cfb0277453589ec8303287a41db51e2c71d559d6",
            "typeString": "literal_string \"Candidate 13\""
        },
        "value": "Candidate 13"
    }
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier":
"t_stringliteral_c60b834235d3a3b6cd493919cfb0277453589ec8303287a41db51e2c71d559d6",
            "typeString": "literal_string \"Candidate 13\""
        }
    ],
    "id": 75,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
    "src": "1001:12:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (string memory)"
    }
},

```

```
"id": 77,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "1001:28:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 78,
"nodeType": "ExpressionStatement",
"src": "1001:28:0"
},
{
  "expression": {
    "argumentTypes": null,
    "arguments": [
      {
        "argumentTypes": null,
        "hexValue": "43616e646964617465203134",
        "id": 80,
        "isConstant": false,
        "isLValue": false,
        "isPure": true,
```

```
    "kind": "string",
    "IValueRequested": false,
    "nodeType": "Literal",
    "src": "1052:14:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
        "t_stringliteral_7b8fd56c42b4fc08e0d35711e84107d5815bfa344c8a07ad59975acf04c0cf12",
      "typeString": "literal_string \"Candidate 14\""
    },
    "value": "Candidate 14"
  }
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier":
        "t_stringliteral_7b8fd56c42b4fc08e0d35711e84107d5815bfa344c8a07ad59975acf04c0cf12",
      "typeString": "literal_string \"Candidate 14\""
    }
  ],
  "id": 79,
  "name": "addCandidate",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 107,
  "src": "1039:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
```

```

        "typeString": "function (string memory)"
    }
},
    "id": 81,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "1039:28:0",
    "typeDescriptions": {
        "typeIdentifier": "t_tuple$__$",
        "typeString": "tuple()"
    }
},
    "id": 82,
    "nodeType": "ExpressionStatement",
    "src": "1039:28:0"
},
{
    "expression": {
        "argumentTypes": null,
        "arguments": [
            {
                "argumentTypes": null,
                "hexValue": "43616e6469964617465203135",
                "id": 84,

```

```
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "lValueRequested": false,
    "nodeType": "Literal",
    "src": "1090:14:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
        "t_stringliteral_574cf68e28b0080f9791ac99cffa2a0ef6fa1d69ac0c072652dbe4b920a0c6cb",
      "typeString": "literal_string \"Candidate 15\""
    },
    "value": "Candidate 15"
  },
  "expression": {
    "argumentTypes": [
      {
        "typeIdentifier":
          "t_stringliteral_574cf68e28b0080f9791ac99cffa2a0ef6fa1d69ac0c072652dbe4b920a0c6cb",
        "typeString": "literal_string \"Candidate 15\""
      }
    ],
    "id": 83,
    "name": "addCandidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 107,
```

```
"src": "1077:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_function_internal_nonpayable$_t_string_memory_ptr_$returns$__$",
  "typeString": "function (string memory)"
}
},
"id": 85,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
"names": [],
"nodeType": "FunctionCall",
"src": "1077:28:0",
"typeDescriptions": {
  "typeIdentifier": "t_tuple$__$",
  "typeString": "tuple()"
}
},
"id": 86,
"nodeType": "ExpressionStatement",
"src": "1077:28:0"
}
]
},
"documentation": null,
"id": 88,
"implemented": true,
```

```
"kind": "constructor",
"modifiers": [],
"name": "",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 25,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "534:2:0"
},
"returnParameters": {
  "id": 26,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "544:0:0"
},
"scope": 154,
"src": "522:590:0",
"stateMutability": "nonpayable",
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 106,
    "nodeType": "Block",
    "src": "1169:111:0",
    "statements": [
      {
```

```
"expression": {
  "argumentTypes": null,
  "id": 94,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "lValueRequested": false,
  "nodeType": "UnaryOperation",
  "operator": "++",
  "prefix": false,
  "src": "1179:18:0",
  "subExpression": {
    "argumentTypes": null,
    "id": 93,
    "name": "candidatesCount",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 18,
    "src": "1179:15:0",
    "typeDescriptions": {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    }
  },
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
```



```
"id": 95,
"nodeType": "ExpressionStatement",
"src": "1179:18:0"
},
{
  "expression": {
    "argumentTypes": null,
    "id": 104,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
    "leftHandSide": {
      "argumentTypes": null,
      "baseExpression": {
        "argumentTypes": null,
        "id": 96,
        "name": "candidates",
        "nodeType": "Identifier",
        "overloadedDeclarations": [],
        "referencedDeclaration": 16,
        "src": "1207:10:0",
        "typeDescriptions": {
          "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
          "typeString": "mapping(uint256 => struct Election.Candidate storage ref)"
        }
      },
      "id": 97,
      "isConstant": false,
      "isLValue": true,
      "isPure": false,
      "lValueRequested": false,
      "leftHandSide": {
        "id": 98,
        "indexExpression": {
```

```
"argumentTypes": null,
"id": 97,
"name": "candidatesCount",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 18,
"src": "1218:15:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"lValueRequested": true,
"nodeType": "IndexAccess",
"src": "1207:27:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_storage",
  "typeString": "struct Election.Candidate storage ref"
},
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "arguments": [
    {
```

```
"argumentTypes": null,
"id": 100,
"name": "candidatesCount",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 18,
"src": "1247:15:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
{
  "argumentTypes": null,
  "id": 101,
  "name": "_name",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 90,
  "src": "1264:5:0",
  "typeDescriptions": {
    "typeIdentifier": "t_string_memory_ptr",
    "typeString": "string memory"
  }
},
{
  "argumentTypes": null,
  "hexValue": "30",
  "id": 102,
```

```
"isConstant": false,
"isLValue": false,
"isPure": true,
"kind": "number",
"IValueRequested": false,
"nodeType": "Literal",
"src": "1271:1:0",
"subdenomination": null,
"typeDescriptions": {
  "typeIdentifier": "t_rational_0_by_1",
  "typeString": "int_const 0"
},
"value": "0"
},
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_uint256",
      "typeString": "uint256"
    },
    {
      "typeIdentifier": "t_string_memory_ptr",
      "typeString": "string memory"
    },
    {
      "typeIdentifier": "t_rational_0_by_1",
      "typeString": "int_const 0"
    }
  ]
}
```

```

    ],
    "id": 99,
    "name": "Candidate",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 8,
    "src": "1237:9:0",
    "typeDescriptions": {
      "typeIdentifier": "t_type$_t_struct$_Candidate_$8_storage_ptr_$",
      "typeString": "type(struct Election.Candidate storage pointer)"
    }
  },
  "id": 103,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "kind": "structConstructorCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "1237:36:0",
  "typeDescriptions": {
    "typeIdentifier": "t_struct$_Candidate_$8_memory",
    "typeString": "struct Election.Candidate memory"
  }
},
"src": "1207:66:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_storage",

```

```
        "typeString": "struct Election.Candidate storage ref"
    }
},
    "id": 105,
    "nodeType": "ExpressionStatement",
    "src": "1207:66:0"
}
]
},
    "documentation": null,
    "id": 107,
    "implemented": true,
    "kind": "function",
    "modifiers": [],
    "name": "addCandidate",
    "nodeType": "FunctionDefinition",
    "parameters": {
        "id": 91,
        "nodeType": "ParameterList",
        "parameters": [
            {
                "constant": false,
                "id": 90,
                "name": "_name",
                "nodeType": "VariableDeclaration",
                "scope": 107,
                "src": "1141:19:0",
                "stateVariable": false,
                "storageLocation": "memory",
```

```
"typeDescriptions": {
  "typeIdentifier": "t_string_memory_ptr",
  "typeString": "string"
},
"typeName": {
  "id": 89,
  "name": "string",
  "nodeType": "ElementaryTypeName",
  "src": "1141:6:0",
  "typeDescriptions": {
    "typeIdentifier": "t_string_storage_ptr",
    "typeString": "string"
  }
},
"value": null,
"visibility": "internal"
}
],
"src": "1140:21:0"
},
"returnParameters": {
  "id": 92,
  "nodeType": "ParameterList",
  "parameters": [],
  "src": "1169:0:0"
},
"scope": 154,
"src": "1118:162:0",
"stateMutability": "nonpayable",
```

```
"superFunction": null,
"visibility": "public"
},
{
  "body": {
    "id": 152,
    "nodeType": "Block",
    "src": "1327:510:0",
    "statements": [
      {
        "expression": {
          "argumentTypes": null,
          "arguments": [
            {
              "argumentTypes": null,
              "id": 117,
              "isConstant": false,
              "isLValue": false,
              "isPure": false,
              "lValueRequested": false,
              "nodeType": "UnaryOperation",
              "operator": "!",
              "prefix": true,
              "src": "1395:19:0",
              "subExpression": {
                "argumentTypes": null,
                "baseExpression": {
                  "argumentTypes": null,
                  "id": 113,
```



```
"name": "voters",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 12,
"src": "1396:6:0",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
  "typeString": "mapping(address => bool)"
}
},
"id": 116,
"indexExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 114,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 226,
    "src": "1403:3:0",
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
      "typeString": "msg"
    }
  },
  "id": 115,
  "isConstant": false,
  "isLValue": false,
```

```
    "isPure": false,
    "lValueRequested": false,
    "memberName": "sender",
    "nodeType": "MemberAccess",
    "referencedDeclaration": null,
    "src": "1403:10:0",
    "typeDescriptions": {
      "typeIdentifier": "t_address_payable",
      "typeString": "address payable"
    }
  },
  "isConstant": false,
  "isLValue": true,
  "isPure": false,
  "lValueRequested": false,
  "nodeType": "IndexAccess",
  "src": "1396:18:0",
  "typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
  }
},
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
},
{
  "argumentTypes": null,
```

```
"hexValue": "796f75206861766520616c7265616479207666f746564",
"id": 118,
"isConstant": false,
"isLValue": false,
"isPure": true,
"kind": "string",
"IValueRequested": false,
"nodeType": "Literal",
"src": "1415:24:0",
"subdenomination": null,
"typeDescriptions": {
  "typeIdentifier":
    "t_stringliteral_4c343741a23ec597e6e0860f12af81ec477bee9818ba412eac24c75c33aaff0d",
  "typeString": "literal_string \"you have already voted\""
},
"value": "you have already voted"
},
],
"expression": {
  "argumentTypes": [
    {
      "typeIdentifier": "t_bool",
      "typeString": "bool"
    },
    {
      "typeIdentifier":
        "t_stringliteral_4c343741a23ec597e6e0860f12af81ec477bee9818ba412eac24c75c33aaff0d",
      "typeString": "literal_string \"you have already voted\""
    }
  ]
}
```

```

    ],
    "id": 112,
    "name": "require",
    "nodeType": "Identifier",
    "overloadedDeclarations": [
        229,
        230
    ],
    "referencedDeclaration": 230,
    "src": "1387:7:0",
    "typeDescriptions": {
        "typeIdentifier":
            "t_function_require_pure$_t_bool_$_t_string_memory_ptr_$returns$__$",
        "typeString": "function (bool,string memory) pure"
    }
},
    "id": 119,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "kind": "functionCall",
    "lValueRequested": false,
    "names": [],
    "nodeType": "FunctionCall",
    "src": "1387:53:0",
    "typeDescriptions": {
        "typeIdentifier": "t_tuple$__$",
        "typeString": "tuple()"
    }
}

```

```
    },  
    "id": 120,  
    "nodeType": "ExpressionStatement",  
    "src": "1387:53:0"  
  },  
  {  
    "expression": {  
      "argumentTypes": null,  
      "arguments": [  
        {  
          "argumentTypes": null,  
          "commonType": {  
            "typeIdentifier": "t_bool",  
            "typeString": "bool"  
          },  
          "id": 128,  
          "isConstant": false,  
          "isLValue": false,  
          "isPure": false,  
          "lValueRequested": false,  
          "leftExpression": {  
            "argumentTypes": null,  
            "commonType": {  
              "typeIdentifier": "t_uint256",  
              "typeString": "uint256"  
            },  
            "id": 124,  
            "isConstant": false,  
            "isLValue": false,
```

```
"isPure": false,
"IValueRequested": false,
"leftExpression": {
  "argumentTypes": null,
  "id": 122,
  "name": "_candidateId",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 109,
  "src": "1496:12:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"nodeType": "BinaryOperation",
"operator": ">",
"rightExpression": {
  "argumentTypes": null,
  "hexValue": "30",
  "id": 123,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
  "kind": "number",
  "IValueRequested": false,
  "nodeType": "Literal",
  "src": "1511:1:0",
  "subdenomination": null,
```

```
"typeDescriptions": {
  "typeIdentifier": "t_rational_0_by_1",
  "typeString": "int_const 0"
},
"value": "0"
},
"src": "1496:16:0",
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
},
"nodeType": "BinaryOperation",
"operator": "&&",
"rightExpression": {
  "argumentTypes": null,
  "commonType": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  },
  "id": 127,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,
  "IValueRequested": false,
  "leftExpression": {
    "argumentTypes": null,
    "id": 125,
    "name": "_candidateId",
```

```
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 109,
"src": "1516:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"nodeType": "BinaryOperation",
"operator": "<=",
"rightExpression": {
  "argumentTypes": null,
  "id": 126,
  "name": "candidatesCount",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 18,
  "src": "1532:15:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"src": "1516:31:0",
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
```



```

    },
    "src": "1496:51:0",
    "typeDescriptions": {
      "typeIdentifier": "t_bool",
      "typeString": "bool"
    }
  },
  {
    "argumentTypes": null,
    "hexValue": "63616e64696461746520646f77736e2774206578697374",
    "id": 129,
    "isConstant": false,
    "isLValue": false,
    "isPure": true,
    "kind": "string",
    "lValueRequested": false,
    "nodeType": "Literal",
    "src": "1548:25:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier":
"t_stringliteral_cf5d1abfeb023c4d82d9ffa9641a235531a9b7934122b0cd81987b4cc40f6b65",
      "typeString": "literal_string \"candidate doesn't exist\""
    },
    "value": "candidate doesn't exist"
  }
],
"expression": {
  "argumentTypes": [

```

```

    {
      "typeIdentifier": "t_bool",
      "typeString": "bool"
    },
    {
      "typeIdentifier":
"t_stringliteral_cf5d1abfeb023c4d82d9ffa9641a235531a9b7934122b0cd81987b4cc40f6b65",
      "typeString": "literal_string \"candidate dowsn't exist\""
    }
  ],
  "id": 121,
  "name": "require",
  "nodeType": "Identifier",
  "overloadedDeclarations": [
    229,
    230
  ],
  "referencedDeclaration": 230,
  "src": "1488:7:0",
  "typeDescriptions": {
    "typeIdentifier":
"t_function_require_pure$_t_bool_$_t_string_memory_ptr_$returns$__$",
    "typeString": "function (bool,string memory) pure"
  }
},
  "id": 130,
  "isConstant": false,
  "isLValue": false,
  "isPure": false,

```

```
"kind": "functionCall",
  "lValueRequested": false,
  "names": [],
  "nodeType": "FunctionCall",
  "src": "1488:86:0",
  "typeDescriptions": {
    "typeIdentifier": "t_tuple$__$",
    "typeString": "tuple()"
  }
},
"id": 131,
"nodeType": "ExpressionStatement",
"src": "1488:86:0"
},
{
  "expression": {
    "argumentTypes": null,
    "id": 137,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
    "leftHandSide": {
      "argumentTypes": null,
      "baseExpression": {
        "argumentTypes": null,
        "id": 132,
        "name": "voters",
        "nodeType": "Identifier",
```

```
"overloadedDeclarations": [],
"referencedDeclaration": 12,
"src": "1624:6:0",
"typeDescriptions": {
  "typeIdentifier": "t_mapping$_t_address_$_t_bool_$",
  "typeString": "mapping(address => bool)"
}
},
"id": 135,
"indexExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "id": 133,
    "name": "msg",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 226,
    "src": "1631:3:0",
    "typeDescriptions": {
      "typeIdentifier": "t_magic_message",
      "typeString": "msg"
    }
  },
},
"id": 134,
"isConstant": false,
"isLValue": false,
"isPure": false,
"IValueRequested": false,
```

```
"memberName": "sender",
"nodeType": "MemberAccess",
"referencedDeclaration": null,
"src": "1631:10:0",
"typeDescriptions": {
  "typeIdentifier": "t_address_payable",
  "typeString": "address payable"
}
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"lValueRequested": true,
"nodeType": "IndexAccess",
"src": "1624:18:0",
"typeDescriptions": {
  "typeIdentifier": "t_bool",
  "typeString": "bool"
}
},
"nodeType": "Assignment",
"operator": "=",
"rightHandSide": {
  "argumentTypes": null,
  "hexValue": "74727565",
  "id": 136,
  "isConstant": false,
  "isLValue": false,
  "isPure": true,
```

```
    "kind": "bool",
    "lValueRequested": false,
    "nodeType": "Literal",
    "src": "1645:4:0",
    "subdenomination": null,
    "typeDescriptions": {
      "typeIdentifier": "t_bool",
      "typeString": "bool"
    },
    "value": "true"
  },
  "src": "1624:25:0",
  "typeDescriptions": {
    "typeIdentifier": "t_bool",
    "typeString": "bool"
  }
},
"id": 138,
"nodeType": "ExpressionStatement",
"src": "1624:25:0"
},
{
  "expression": {
    "argumentTypes": null,
    "id": 140,
    "isConstant": false,
    "isLValue": false,
    "isPure": false,
    "lValueRequested": false,
```

```
"nodeType": "UnaryOperation",
"operator": "++",
"prefix": false,
"src": "1659:13:0",
"subExpression": {
  "argumentTypes": null,
  "id": 139,
  "name": "votersCount",
  "nodeType": "Identifier",
  "overloadedDeclarations": [],
  "referencedDeclaration": 20,
  "src": "1659:11:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"id": 141,
"nodeType": "ExpressionStatement",
"src": "1659:13:0"
},
{
  "expression": {
    "argumentTypes": null,
```

```
"id": 146,
"isConstant": false,
"isLValue": false,
"isPure": false,
"lValueRequested": false,
"nodeType": "UnaryOperation",
"operator": "++",
"prefix": false,
"src": "1722:37:0",
"subExpression": {
  "argumentTypes": null,
  "expression": {
    "argumentTypes": null,
    "baseExpression": {
      "argumentTypes": null,
      "id": 142,
      "name": "candidates",
      "nodeType": "Identifier",
      "overloadedDeclarations": [],
      "referencedDeclaration": 16,
      "src": "1722:10:0",
      "typeDescriptions": {
        "typeIdentifier": "t_mapping$_t_uint256_$_t_struct$_Candidate_$8_storage_$",
        "typeString": "mapping(uint256 => struct Election.Candidate storage ref)"
      }
    },
  },
},
"id": 144,
"indexExpression": {
  "argumentTypes": null,
```



```
"id": 143,
"name": "_candidateId",
"nodeType": "Identifier",
"overloadedDeclarations": [],
"referencedDeclaration": 109,
"src": "1733:12:0",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
}
},
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": false,
"nodeType": "IndexAccess",
"src": "1722:24:0",
"typeDescriptions": {
  "typeIdentifier": "t_struct$_Candidate_$8_storage",
  "typeString": "struct Election.Candidate storage ref"
}
},
"id": 145,
"isConstant": false,
"isLValue": true,
"isPure": false,
"IValueRequested": true,
"memberName": "voteCount",
"nodeType": "MemberAccess",
```

```
    "referencedDeclaration": 7,  
    "src": "1722:34:0",  
    "typeDescriptions": {  
      "typeIdentifier": "t_uint256",  
      "typeString": "uint256"  
    }  
  },  
  "typeDescriptions": {  
    "typeIdentifier": "t_uint256",  
    "typeString": "uint256"  
  }  
},  
"id": 147,  
"nodeType": "ExpressionStatement",  
"src": "1722:37:0"  
},  
{  
  "eventCall": {  
    "argumentTypes": null,  
    "arguments": [  
      {  
        "argumentTypes": null,  
        "id": 149,  
        "name": "_candidateId",  
        "nodeType": "Identifier",  
        "overloadedDeclarations": [],  
        "referencedDeclaration": 109,  
        "src": "1817:12:0",  
        "typeDescriptions": {
```

```
        "typeIdentifier": "t_uint256",
        "typeString": "uint256"
    }
}
],
"expression": {
    "argumentTypes": [
        {
            "typeIdentifier": "t_uint256",
            "typeString": "uint256"
        }
    ],
    "id": 148,
    "name": "votedEvent",
    "nodeType": "Identifier",
    "overloadedDeclarations": [],
    "referencedDeclaration": 24,
    "src": "1806:10:0",
    "typeDescriptions": {
        "typeIdentifier": "t_function_event_nonpayable$_t_uint256_$returns$__$",
        "typeString": "function (uint256)"
    }
},
"id": 150,
"isConstant": false,
"isLValue": false,
"isPure": false,
"kind": "functionCall",
"lValueRequested": false,
```

```
    "names": [],
    "nodeType": "FunctionCall",
    "src": "1806:24:0",
    "typeDescriptions": {
      "typeIdentifier": "t_tuple$__$",
      "typeString": "tuple()"
    }
  },
  "id": 151,
  "nodeType": "EmitStatement",
  "src": "1801:29:0"
}
]
},
"documentation": null,
"id": 153,
"implemented": true,
"kind": "function",
"modifiers": [],
"name": "vote",
"nodeType": "FunctionDefinition",
"parameters": {
  "id": 110,
  "nodeType": "ParameterList",
  "parameters": [
    {
      "constant": false,
      "id": 109,
      "name": "_candidateId",
```

```
"nodeType": "VariableDeclaration",
"scope": 153,
"src": "1301:17:0",
"stateVariable": false,
"storageLocation": "default",
"typeDescriptions": {
  "typeIdentifier": "t_uint256",
  "typeString": "uint256"
},
"typeName": {
  "id": 108,
  "name": "uint",
  "nodeType": "ElementaryTypeName",
  "src": "1301:4:0",
  "typeDescriptions": {
    "typeIdentifier": "t_uint256",
    "typeString": "uint256"
  }
},
"value": null,
"visibility": "internal"
}
],
"src": "1300:19:0"
},
"returnParameters": {
  "id": 111,
  "nodeType": "ParameterList",
  "parameters": [],
```

```
    "src": "1327:0:0"
  },
  "scope": 154,
  "src": "1286:551:0",
  "stateMutability": "nonpayable",
  "superFunction": null,
  "visibility": "public"
}
],
"scope": 155,
"src": "25:1814:0"
}
],
"src": "0:1839:0"
},
"compiler": {
  "name": "solc",
  "version": "0.5.0+commit.1d4f565a.Emscripten.clang"
},
"networks": {
  "1369": {
    "events": {},
    "links": {},
    "address": "0x85557f4B6DFE00E783c3779FA7793347D85698F7",
    "transactionHash":
    "0x7a689bae4c77620861d2d252b87e5942f328a78fb95752d4451ba6bce16311ab"
  },
  "5777": {
    "events": {},
```

```
"links": {},  
  "address": "0x0A121E62F2AFed3A08EB79DA402E341A938B442",  
  "transactionHash": "0xd8fcfcff7c477d9328ee47cd133e8fc9d437215594bb72740b647f8d5dcd90b"  
},  
"schemaVersion": "3.0.12",  
"updatedAt": "2019-08-21T19:13:08.327Z",  
"devdoc": {  
  "methods": {}  
},  
"userdoc": {  
  "methods": {}  
}  
}
```