```
1 using System;
 2 using System.Collections.Generic;
 3 using System.Data.OleDb;
 4 using System.Linq;
 5 using System.Text;
 6 using System.Threading.Tasks;
 7 using System.Data;
 8
 9 namespace Nihulon2.Model.DbAccess
10 {
        // The class that provides the connection to the DB
11
12
        // end execution of different queries
13
        public class DbAccess
14
        {
15
            #region Constructor + Members
16
            protected OleDbConnection conn = null;
17
            public DbAccess(string connectionstring)
18
19
            {
20
                _conn = new OleDbConnection(connectionstring);
21
            }
22
            #endregion
23
24
            #region Protected Methods
25
            // Open a connection with the DB
            protected void Connect()
26
27
            {
                if(_conn.State != ConnectionState.Open)
28
29
                    _conn.Open();
30
31
                }
32
            }
33
            // Close the connection
34
            protected void Disconnect()
35
            {
36
                _conn.Close();
            }
37
            // Execute a query that doesn't returns any result
38
39
            protected void ExecuteSimpleQuery(OleDbCommand command)
40
            {
                lock( conn){
41
42
                    Connect();
43
                    command.Connection = _conn;
44
                    try
45
                    {
                        command.ExecuteNonQuery();
46
47
                    }
48
                    finally
49
                    {
50
                        Disconnect();
51
                    }
                }
52
53
            }
54
            // Execute a query that returns an integer value
55
            protected int ExecuteScalarIntquery(OleDbCommand command)
56
```

```
57
                int ret = -1;
58
                lock (_conn)
59
                {
60
                    Connect();
61
                    command.Connection = _conn;
62
                    try
63
                    {
                         ret = (int)command.ExecuteScalar();
64
65
                    }
66
                    finally
67
                    {
68
                         Disconnect();
69
                    }
70
                }
71
                return ret;
72
            }
73
            // Execute a query that returns complex result
74
            protected DataSet GetMultipleQuery(OleDbCommand command)
75
76
                DataSet dataset = new DataSet();
77
                lock (_conn)
78
79
                    Connect();
80
                    command.Connection = _conn;
81
                    try
82
                    {
                         OleDbDataAdapter adapter = new OleDbDataAdapter();
83
84
                         adapter.SelectCommand = command;
85
                         adapter.Fill(dataset);
86
                    finally
87
88
                    {
89
                         Disconnect();
90
                    }
91
                }
92
                return dataset;
93
94
            #endregion
95
        }
96 }
97
98
```