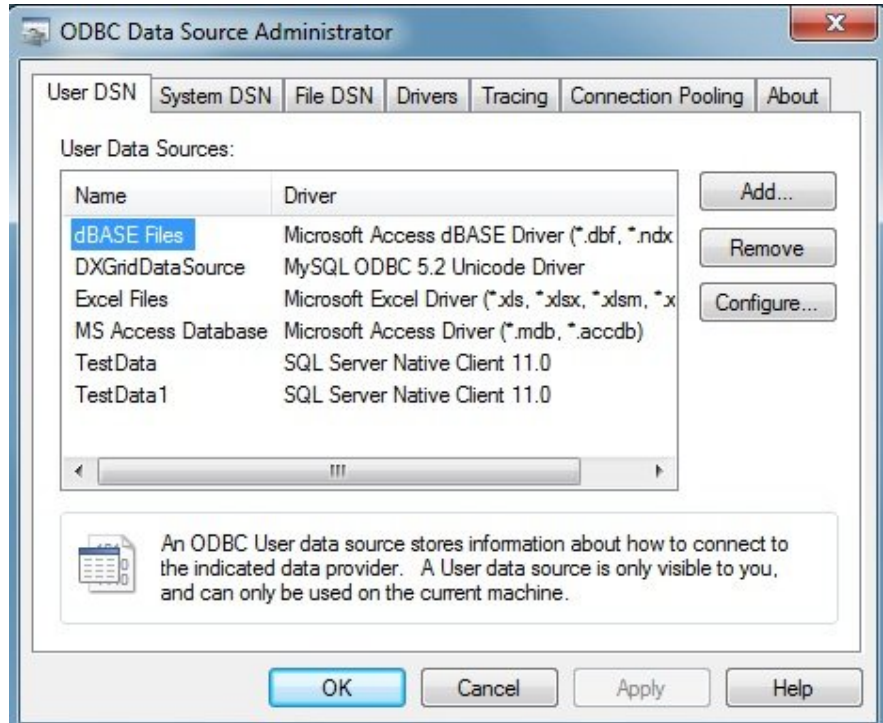# Java- SQL Server Connectivity

Creating an ODBC connection.

Step 1: Go to Control Panel -> System and Security->Administrative Tools-> Data source (ODBC)

Step: 2 Click the Add button

Step 3: Choose the SQL Server click finish

Step 4: Choose a name for the Datasource, example: TestData and choose the SQL server from the server drop down list. (Mat take time)

Note: If the server name does not appear in the list, go to Services from the Administrative Tools and start the SQL browser service.

Step 5 Use Windows authentication

Step 6: Change the default database to pubs

Step 7: Click next and then click finish

Objective: To explore Java-SQL connectivity by showing/updating the Authors table of pubs database.

```java
import java.sql.*;
public class TestSQLJava
{
        Connection con;
        TestSQLJava()
        {
                createConnection();
                //showData();
                //showCustomData("172-32-1176");
                //updateData("172-32-1176","CA");

        }
        void  createConnection()
        {
                try
                {       //Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con=DriverManager.getConnection("jdbc:odbc:TestData"); }
                catch(Exception exp) {  System.out.print("No Connection with DB"+exp); }
        }
        void showData()
        {
                try
                {
                        Statement st=con.createStatement();
                        ResultSet rs=st.executeQuery("Select * from Authors");
                        System.out.println("Author ID: \tAuthor last name: ");
                        while(rs.next())
                        System.out.println(rs.getString(1)+"\t"+rs.getString(2));
                }
                catch(Exception exp) { System.out.print("Probleb with query result"+exp); }

        }
        void showCustomData(String au_id)
        {
                try
                {
                        PreparedStatement pst=con.prepareStatement("Select * from Authors where au_id=?");
                        pst.setString(1,au_id);
                        ResultSet rs=pst.executeQuery();
                        System.out.println("Author ID: \tAuthor last name: ");
                        while(rs.next())
                        System.out.println(rs.getString(1)+"\t"+rs.getString(2));
                }
                catch(Exception exp) {System.out.print("Probleb with query result"+exp); }

        }
        void updateData(String au_id, String state)
        {
                try
                {
                        PreparedStatement pst=con.prepareStatement("update  authors set state=? where au_id=?");
                        pst.setString(1,state);
                        pst.setString(2,au_id);
                        pst.executeUpdate();

                }
                catch(Exception exp) { System.out.print("Probleb with query result"+exp); }

        }
        public static void main(String args[])
        {
                new TestSQLJava();
        }
}
```