

Program7—create a table products(prodid , prodname, price , quantity)

create form to insert , update , delete and search with sqlparameters.

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;

namespace Ado_Assignment1
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        string str = "server=HP-LAPTOP\\SQLEXPRESS;integrated
security=true;database=mkpsample";
        SqlConnection con = null;
        SqlCommand command = null;
        private void button1_Click(object sender, EventArgs e)
        {
            try
            {
                con = new SqlConnection(str);
                string qr = "insert into products(prodid,prodname,price,quantity)
values(@prodid,@prodname,@price,@quantity)";
                command = new SqlCommand(qr, con);
                command.Parameters.Add("@prodid", SqlDbType.Int).Value =
Convert.ToInt32(textBox1.Text);
                command.Parameters.Add("@prodname", SqlDbType.VarChar, 20).Value =
textBox2.Text;
                command.Parameters.Add("@price", SqlDbType.Int).Value =
Convert.ToInt32(textBox3.Text);
                command.Parameters.Add("@quantity", SqlDbType.Int).Value =
Convert.ToInt32(textBox4.Text);
                con.Open();
                command.ExecuteNonQuery();
                textBox1.Clear();
                textBox2.Clear();
                textBox1.Focus();
                label6.Text = "Record saved successfully";
            }
            catch (Exception ee)
            {
                MessageBox.Show(ee.ToString());
            }
            finally
            {
                con.Close();
            }
        }
    }
}
```

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    }

    private void button2_Click(object sender, EventArgs e)
    {
        try
        {
            con = new SqlConnection(str);
            string qr = "update products set
prodname=@prodname,price=@price,quantity=@quantity where prodid=@prodid";
            command = new SqlCommand(qr, con);
            command.Parameters.Add("@prodname", SqlDbType.VarChar, 20).Value =
textBox2.Text;
            command.Parameters.Add("@price", SqlDbType.Decimal).Value =
Convert.ToInt32(textBox3.Text);
            command.Parameters.Add("@quantity", SqlDbType.Int).Value =
Convert.ToInt32(textBox4.Text);
            command.Parameters.Add("@prodid", SqlDbType.Int).Value =
Convert.ToInt32(textBox1.Text);
            con.Open();
            command.ExecuteNonQuery();
            textBox1.Clear();
            textBox2.Clear();
            textBox1.Focus();
            MessageBox.Show("Record updated successfully");
        }
        catch (Exception ee)
        {
            MessageBox.Show(ee.ToString());
        }
        finally
        {
            con.Close();
        }
    }

    private void button3_Click(object sender, EventArgs e)
    {
        try
        {
            con = new SqlConnection(str);
            string qr = "delete from products where prodid=@prodid or
prodname=@prodname";
            command = new SqlCommand(qr, con);
            command.Parameters.Add("@prodid", SqlDbType.Int).Value =
Convert.ToInt32(textBox1.Text);
            command.Parameters.Add("@prodname", SqlDbType.VarChar, 20).Value =
textBox2.Text;
            con.Open();
            command.ExecuteNonQuery();
            textBox1.Clear();
            textBox2.Clear();
            textBox1.Focus();
            MessageBox.Show("Record deleted successfully");
        }
        catch (Exception ee)
    }

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        {
            MessageBox.Show(ee.ToString());
        }
        finally
        {
            con.Close();
        }
    }

    private void button4_Click(object sender, EventArgs e)
    {
        try
        {
            con = new SqlConnection(str);
            string qr = "select * from products where prodid=@prodid";
            command = new SqlCommand(qr, con);
            command.Parameters.Add("prodid", SqlDbType.Int).Value =
Convert.ToInt32(textBox1.Text);
            con.Open();
            SqlDataReader dr = command.ExecuteReader();
            int flag = 0;
            textBox2.Clear();
            while (dr.Read())
            {
                flag = 1;
                textBox2.Text = dr["prodname"].ToString();
                textBox3.Text = dr["price"].ToString();
                textBox4.Text = dr["quantity"].ToString();
            }
            dr.Close();
            if (flag == 0)
            {
                MessageBox.Show("Record not found");
            }
        }
        catch (Exception ee)
        {
            MessageBox.Show(ee.ToString());
        }
        finally
        {
            con.Close();
        }
    }
}
}
}

```

Output-

The screenshot displays the Visual Studio IDE with a C# application named 'Ado_Assignment1'. A 'Product Details' dialog box is open, showing the following fields:

- product id: 1
- product name: Mouse
- price: 400
- quantity: 2

Buttons at the bottom of the dialog include 'save', 'update', 'delete', and a 'search record' button. A message at the bottom of the dialog states 'Record saved successfully'.

The background code in the 'Form1' window shows the following C# code snippet:

```
28 string qr = "insert into products(prodId,prodname,price,quantity) values(@prodid,@prodname,@price,@quantity)";  
29 command = new SqlCommand(qr, con);  
30 command.Parameters.Add("@prodid", SqlDbType.Int).Value = Convert.ToInt32(textBox1.Text);  
31 command.Parameters.Add("@prodname", SqlDbType.VarChar, 20).Value = textBox2.Text;  
32 command.Parameters.Add("@price", SqlDbType.Int).Value = Convert.ToInt32(textBox3.Text);  
33 command.Parameters.Add("@quantity", SqlDbType.Int).Value = Convert.ToInt32(textBox4.Text);  
34 con.Open();  
35 command.ExecuteNonQuery();  
36 textBox1.Clear();  
37 textBox2.Clear();
```

The 'Diagnostic Tools' window on the right shows a 'Diagnostics session: 2:55 minutes' and includes sections for 'Events', 'Process Memory (MB)', and 'CPU (% of all processors)'. The 'Exception Settings' window at the bottom shows 'Break When Thrown' and 'Conditions'.