

## DAY 7 ADO.NET

### CONSOLE APPLICATION:

**CREATE**  
**UPDATE**  
**DELETE**  
**SELECT**

### CODE:

```
//// See https://aka.ms/new-console-template for more information
//
//
//
////static void create()
////{
////    Console.WriteLine("Hello, World!");
////    SqlConnection conn = new SqlConnection("data source=PTSQLTESTDB01;database=SAMPLE;integrated
security=true;");
////    conn.Open();
////    SqlCommand cmd = new SqlCommand("create table ProductSam(ProId int primary key,ProName varchar(30))",
conn);
////    cmd.ExecuteNonQuery();
////    Console.WriteLine("Table created successfully");
////    conn.Close();
////}
//

using System;
using System.Data.SqlClient;

namespace MyApp
{
    internal class Program
    {
        static SqlConnection conn;
        static SqlCommand cmd;

        static void Main(string[] args)
        {

            bool res = true;

            while (res)
            {
                Console.WriteLine("Enter the process to be executed:\n1. FETCH\n2. INSERT\n3. UPDATE\n4. DELETE");
                int opt = Convert.ToInt32(Console.ReadLine());
                if (opt == 1)
                {
                    Fetch();
                }
                else if (opt == 2)
                {
                    Console.WriteLine("How many products do you want to insert?");
                    int numberOfProducts = Convert.ToInt32(Console.ReadLine());
                    for (int i = 0; i < numberOfProducts; i++)
                    {
                        Insert();
                    }
                }
            }
        }
    }
}
```

```

        else if (opt == 3)
        {
            Console.WriteLine("How many products need to be updated?");
            int update_product = Convert.ToInt32(Console.ReadLine());
            for (int j = 0; j < update_product; j++)
            {
                Update();
            }
        }
        else if (opt == 4)
        {
            Console.WriteLine("Enter the how many records to be deleted:");
            int del_id = Convert.ToInt32(Console.ReadLine());
            for (int k = 0; k < del_id; k++)
            {
                Delete();
            }
        }
        Console.WriteLine("Do you want to continue (true or false)?");
        res = Convert.ToBoolean(Console.ReadLine());
    }
}

static void GetConnection()
{
    conn = new SqlConnection("data source=PTSQLTESTDB01;database=SAMPLE;integrated security=true;");
    conn.Open();
}

static void Fetch()
{
    GetConnection();
    cmd = new SqlCommand("select * from ProductSam", conn);
    SqlDataReader sdr = cmd.ExecuteReader();
    while (sdr.Read())
    {
        Console.WriteLine($"{sdr[0]} {sdr[1]}");
    }

    conn.Close();
}

static void Insert()
{
    GetConnection();
    Console.WriteLine("Enter the product id and product name:");
    int id = Convert.ToInt32(Console.ReadLine());
    string name = Console.ReadLine();

    cmd = new SqlCommand("insert into ProductSam values(@id, @name)", conn);
    cmd.Parameters.AddWithValue("@id", id);
    cmd.Parameters.AddWithValue("@name", name);
    cmd.ExecuteNonQuery();

    Console.WriteLine("Record Inserted");
    conn.Close();
}

static void Update()
{
    GetConnection();

```

```
Console.WriteLine("Enter the product name and id to be updated");
```

```
string name = Console.ReadLine();
```

```
int id = Convert.ToInt32(Console.ReadLine());
```

```
cmd = new SqlCommand("update ProductSam set ProName=@name where ProId=@id", conn);
```

```
cmd.Parameters.AddWithValue("@id", id);
```

```
cmd.Parameters.AddWithValue("@name", name);
```

```
cmd.ExecuteNonQuery();
```

```
Console.WriteLine("Record Updated");
```

```
conn.Close();
```

```
}
```

```
static void Delete()
```

```
{
```

```
GetConnection();
```

```
Console.WriteLine("Enter the product id to be deleted");
```

```
int id = Convert.ToInt32(Console.ReadLine());
```

```
cmd = new SqlCommand("delete from ProductSam where ProId=@id", conn);
```

```
cmd.Parameters.AddWithValue("@id", id);
```

```
cmd.ExecuteNonQuery();
```

```
Console.WriteLine("Record Deleted");
```

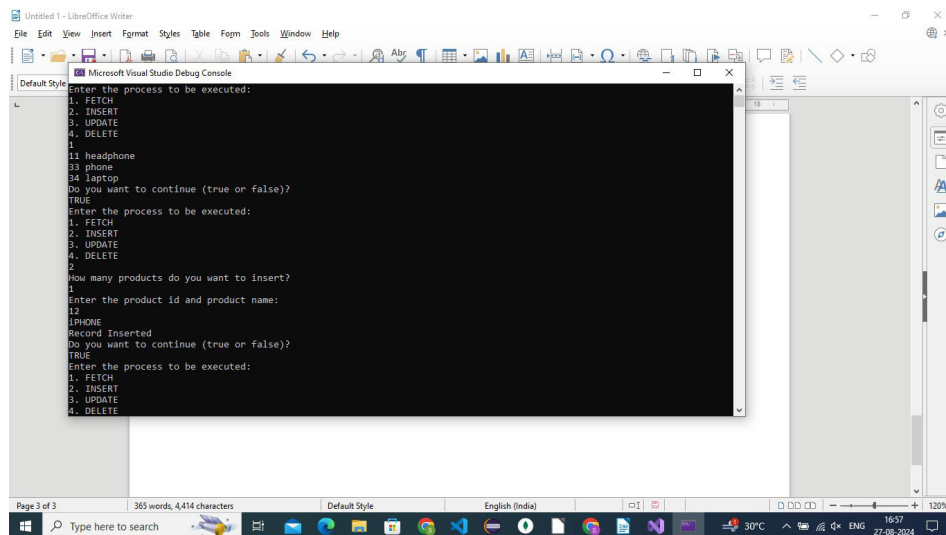
```
conn.Close();
```

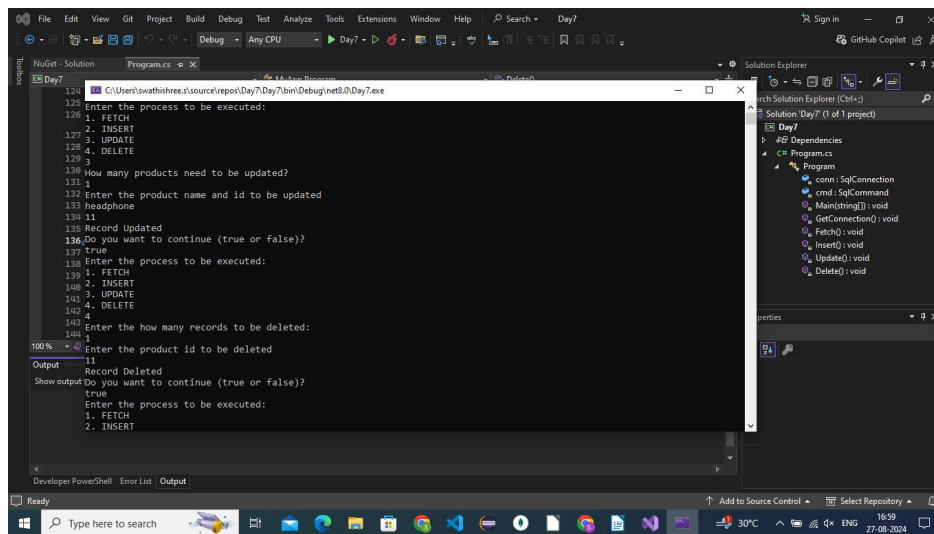
```
}
```

```
}
```

```
}
```

## OUTPUT:





## Windows:

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

namespace grid27

```
{
    public partial class Form1 : Form
    {
        static SqlConnection conn;
        static SqlCommand cmd;
        public Form1()
        {
            InitializeComponent();
        }
        static void GetConnection()
        {
            conn = new SqlConnection("data source=PTSQLTESTDB01;database=SAMPLE;integrated security=true;");
            conn.Open();
        }
        private void Form1_Load(object sender, EventArgs e)
        {
            GetConnection();
            cmd = new SqlCommand("select * from ProductSam", conn);
            SqlDataReader sdr = cmd.ExecuteReader();
            DataTable dt = new DataTable();
            dt.Load(sdr);
            dataGridView1.DataSource = dt;
        }
    }
}
```

```
}
```

```
private void buttonDisplay_Click(object sender, EventArgs e)
{
    //display
    GetConnection();
    cmd = new SqlCommand("select * from ProductSam", conn);

    cmd.ExecuteNonQuery();

    SqlDataReader sdr = cmd.ExecuteReader();

    DataTable dt = new DataTable();
    dt.Load(sdr);

    dataGridView1.DataSource = dt;
}
```

```
private void buttonAdd_Click(object sender, EventArgs e)
{
    GetConnection();
    int id = Convert.ToInt32(textBox1.Text);
    string name = textBox2.Text.ToString();

    SqlCommand cmd = new SqlCommand("insert into ProductSam values(@id,@name)", conn);
    cmd.Parameters.AddWithValue("@id", id);
    cmd.Parameters.AddWithValue("@name", name);

    cmd.ExecuteNonQuery();
    MessageBox.Show("Insert Successfully");
    conn.Close();
}
```

```
private void button1_Click(object sender, EventArgs e)
{
    GetConnection();
    int id = Convert.ToInt32(textBox1.Text);
    string name = textBox2.Text.ToString();
    string s1 = "update ProductSam set ProName=@name where ProId=@id";
    SqlCommand cmd = new SqlCommand(s1, conn);
    cmd.Parameters.AddWithValue("@name", name);

    cmd.Parameters.AddWithValue("@id", id);
    cmd.ExecuteNonQuery();
    MessageBox.Show("Price Updated successfully");
    conn.Close();
}
```

```
private void button2_Click(object sender, EventArgs e)
{
    GetConnection();
    int id = Convert.ToInt32(textBox1.Text);
    string s = "delete from ProductSam where ProId=@id";
    cmd = new SqlCommand(s, conn);
    cmd.Parameters.AddWithValue("@id", id);
    cmd.ExecuteNonQuery();
    MessageBox.Show("One records deleted successfully");
    conn.Close();
}
```

```
private void button3_Click(object sender, EventArgs e)
{
    GetConnection();
```

```

string s1 = "select count(*) from ProductSam";
SqlCommand cmd = new SqlCommand(s1, conn);
int result = Convert.ToInt32(cmd.ExecuteScalar());
MessageBox.Show( "Total Product:" + result.ToString());
    }
}
}

```

**OUTPUT:**

