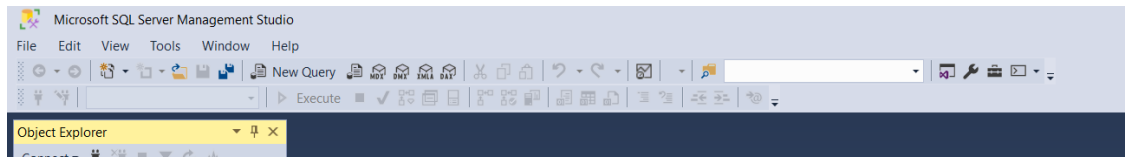Меньчакова Дана ИС213

Создание и подключение Базы данных к Windows Form

1. Заходим в sql Server Managent , подключаемся и создаём там базу данных

2. Далее создаём таблицу с помощью sql запроса
3. Создаём новый запрос, который позволит вставить данные в нашу таблицу.
4. Переходим в Visual Studio, создадим проект Windows Form и подключим базу данных к нему. Нам нужно создать класс, для соединения базы данных к проекту.
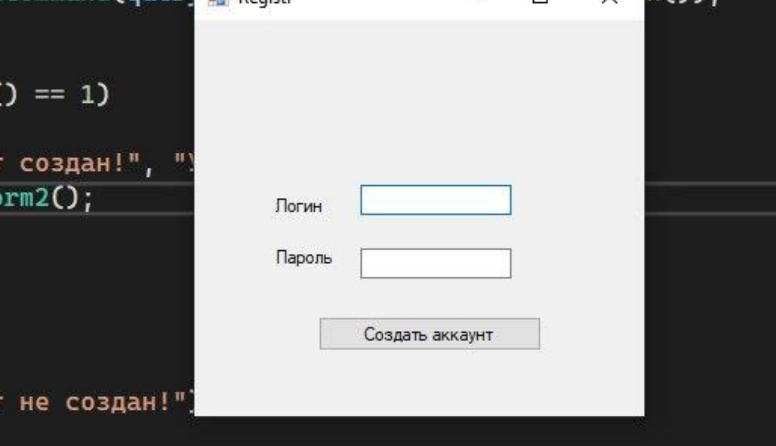
```
using System;using System.Collections.Generic;
using System.ComponentModel;using System.Data;
using System.Drawing;using System.Linq;
using System.Text;using System.Threading.Tasks;
using System.Windows.Forms;
namespace DanaCh{
    public partial class Form1 : Form    {
        Class1 dataBase = new Class1();        public Form1()
        {        InitializeComponent();
        }
        private void Form1_Load(object sender, EventArgs e)        {
        }
    }}
```

```
using System;using System.Collections.Generic;
using System.Data.SqlClient;using System.Linq;
using System.Text;using System.Threading.Tasks;
using System.Windows.Forms;
namespace DanaCh
{   internal class Class1
    {      SqlConnection sqlConnection = new SqlConnection(@"Data Source = DESKTOP-2HL4ATJ;
Initial Catalog = t; Integrated Security = True");
        public void openConnection()
        {        if (sqlConnection.State == System.Data.ConnectionState.Closed) {
sqlConnection.Open(); }
        }
        public void closeConnection()        {
            if (sqlConnection.State == System.Data.ConnectionState.Open) { sqlConnection.Close(); }
}
        public SqlConnection getConnection()
        {        return sqlConnection;
        }
        //public partial class Form1 : Form
        //{
        //   DataBase dataBase = new DataBase();
```

```
    //   public Form1()      //   {
    //      InitializeComponent();      //   }

    //   private void Form1_Load(object sender, EventArgs e)      //   {
    //   }
    //}   }
}
```

Практическая работа 2 Регистрация и авторизация


```
40            string querystring = $"insert into register(login_user, password_user) values('{login}', '{password}')";
41            SqlCommand command = new SqlCommand(querystring, database.GetConnection());
42
43            database.openConnection();
44            if (command.ExecuteNonQuery() == 1)
45            {
46                MessageBox.Show("Аккаунт создан!", "Ура!");
47                Form2 frm_login = new Form2();
48                this.Hide();
49                frm_login.ShowDialog();
50            }
51            else
52            {
53                MessageBox.Show("Аккаунт не создан!");
54            }
55            database.closeConnection();
56        }
57
58        private void Form1_Load(object sender, EventArgs e)
59        {
60
61        }
62        }
63    }
```

```
16      public partial class Form1 : Form
17      {
18          Class1 database = new Class1();
19          public Form1()
20          {
21              InitializeComponent();
22          }
23
24          private void label2_Click(object sender, EventArgs e)
25          {
26
27          }
28
29          private void label1_Click(object sender, EventArgs e)
30          {
31
32          }
33
34          private void button1_Click(object sender, EventArgs e)
35          {
36
37              var login = textBox1.Text;
38              var password = textBox2.Text;
39
40              string querystring = $"insert into register(login_user, password_user) values('{login}', '{password}')";
```

Практическая работа DataGridView

DataGridView — это элемент управления в Windows Forms, который предназначен для отображения и редактирования данных в табличном формате

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

namespace bd_boch_3
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
            LoadData();
        }

        private void Form1_Load(object sender, EventArgs e)
        {

        }
        private void LoadData() {
            string connectString = "Data Source=DESKTOP-U1U3DFA;Initial Catalog=loli;" +
"Integrated Security=true;";
            SqlConnection myConnection = new SqlConnection(connectString);

            myConnection.Open();

            string query = "SELECT * FROM Faculties ORDER BY fac_id";

            SqlCommand command = new SqlCommand(query, myConnection);
            SqlDataReader reader = command.ExecuteReader();

            List<string[]> data = new List<string[]>();
            while (reader.Read())
            {
                data.Add(new string[3]);
                data[data.Count - 1][0] = reader["fac_id"].ToString();
                data[data.Count - 1][1] = reader["fac_name_full"].ToString();
                data[data.Count - 1][2] = reader["fac_name_abbr"].ToString();
            }
            reader.Close();
```

```csharp
            myConnection.Close();

            foreach (string[] s in data)
                dataGridView1.Rows.Add(s);

        }

        private void button1_Click(object sender, EventArgs e)
        {
            string facNameFull = textBox1.Text;
            string facNameAbbr = textBox2.Text;

            string connectString = "Data Source=DESKTOP-U1U3DFA;Initial Catalog=loli;" +
"Integrated Security=true;";
            using (SqlConnection myConnection = new SqlConnection(connectString))
            {
                myConnection.Open();
                string query = "SELECT * FROM FacultiesTist2 ORDER BY fac_id";
                using (SqlCommand command = new SqlCommand(query, myConnection))
                {
                    command.Parameters.AddWithValue("@fullName", facNameFull);
                    command.Parameters.AddWithValue("@abbr", facNameAbbr);

                    int nowId = Convert.ToInt32(command.ExecuteScalar());

                    dataGridView1.Rows.Add(new object[] {nowId, facNameFull, facNameAbbr});
                }
            }
            textBox1.Clear();
            textBox2.Clear();
        }
    }
}
```

```csharp
1    using System;
2    using System.Collections.Generic;
3    using System.ComponentModel;
4    using System.Data;
5    using System.Data.SqlClient;
6    using System.Drawing;
7    using System.Linq;
8    using System.Text;
9    using System.Threading.Tasks;
10   using System.Windows.Forms;
11
12   namespace bd_boch_3
13   {
         Ссылок: 3
14       public partial class Form1 : Form
15       {
             Ссылок: 1
16           public Form1()
17           {
18               InitializeComponent();
19               LoadData();
20           }
21
             Ссылок: 1
22           private void Form1_Load(object sender, EventArgs e)
23           {
24
25           }
             Ссылок: 1
26           private void LoadData() {
27               string connectString = "Data Source=DESKTOP-U1U3DFA;Initial Catalog=loli;" + "Integrated Security=true;";
28               SqlConnection myConnection = new SqlConnection(connectString);
29
30               myConnection.Open();
31
32               string query = "SELECT * FROM Faculties ORDER BY fac_id";
```

```csharp
private void LoadData() {
    string connectString = "Data Source=DESKTOP-U1U3DFA;Initial Catalog=loli;" + "Integrated Security=true;";
    SqlConnection myConnection = new SqlConnection(connectString);

    myConnection.Open();

    string query = "SELECT * FROM Faculties ORDER BY fac_id";

    SqlCommand command = new SqlCommand(query, myConnection);
    SqlDataReader reader = command.ExecuteReader();

    List<string[]> data = new List<string[]>();
    while (reader.Read())
    {
        data.Add(new string[3]);
        data[data.Count - 1][0] = reader["fac_id"].ToString();
        data[data.Count - 1][1] = reader["fac_name_full"].ToString();
        data[data.Count - 1][2] = reader["fac_name_abbr"].ToString();
    }
    reader.Close();
    myConnection.Close();

    foreach (string[] s in data)
        dataGridView1.Rows.Add(s);

}

private void button1_Click(object sender, EventArgs e)
{
    string facNameFull = textBox1.Text;
    string facNameAbbr = textBox2.Text;

    string connectString = "Data Source=DESKTOP-U1U3DFA;Initial Catalog=loli;" + "Integrated Security=true;";
    using (SqlConnection myConnection = new SqlConnection(connectString))
```

```csharp
private void button1_Click(object sender, EventArgs e)
{
    string facNameFull = textBox1.Text;
    string facNameAbbr = textBox2.Text;

    string connectString = "Data Source=DESKTOP-U1U3DFA;Initial Catalog=loli;" + "Integrated Security=true;";
    using (SqlConnection myConnection = new SqlConnection(connectString))
    {
        myConnection.Open();
        string query = "SELECT * FROM FacultiesTist2 ORDER BY fac_id";
        using (SqlCommand command = new SqlCommand(query, myConnection))
        {
            command.Parameters.AddWithValue("@fullName", facNameFull);
            command.Parameters.AddWithValue("@abbr", facNameAbbr);

            int nowId = Convert.ToInt32(command.ExecuteScalar());

            dataGridView1.Rows.Add(new object[] {nowId, facNameFull, facNameAbbr});
        }
    }
    textBox1.Clear();
    textBox2.Clear();
}
```

```
using System;
```

	fac_id	fac_name_id	fac_name_abbr
	10	Сергей	ФСПО
	20	Илья	ФСПО
	30	Дана	ФСПО
▶	0	Кирилл	ФСПО
*			

```csharp
private void Form1_Load(object sender, EventArgs e)
{
```