

ID	ЛОГИН	ПАРОЛЬ	ЭЛ. ПОЧТА
5	Тестов И.И.	123dfg0[ewf	testoff@dkit.ru

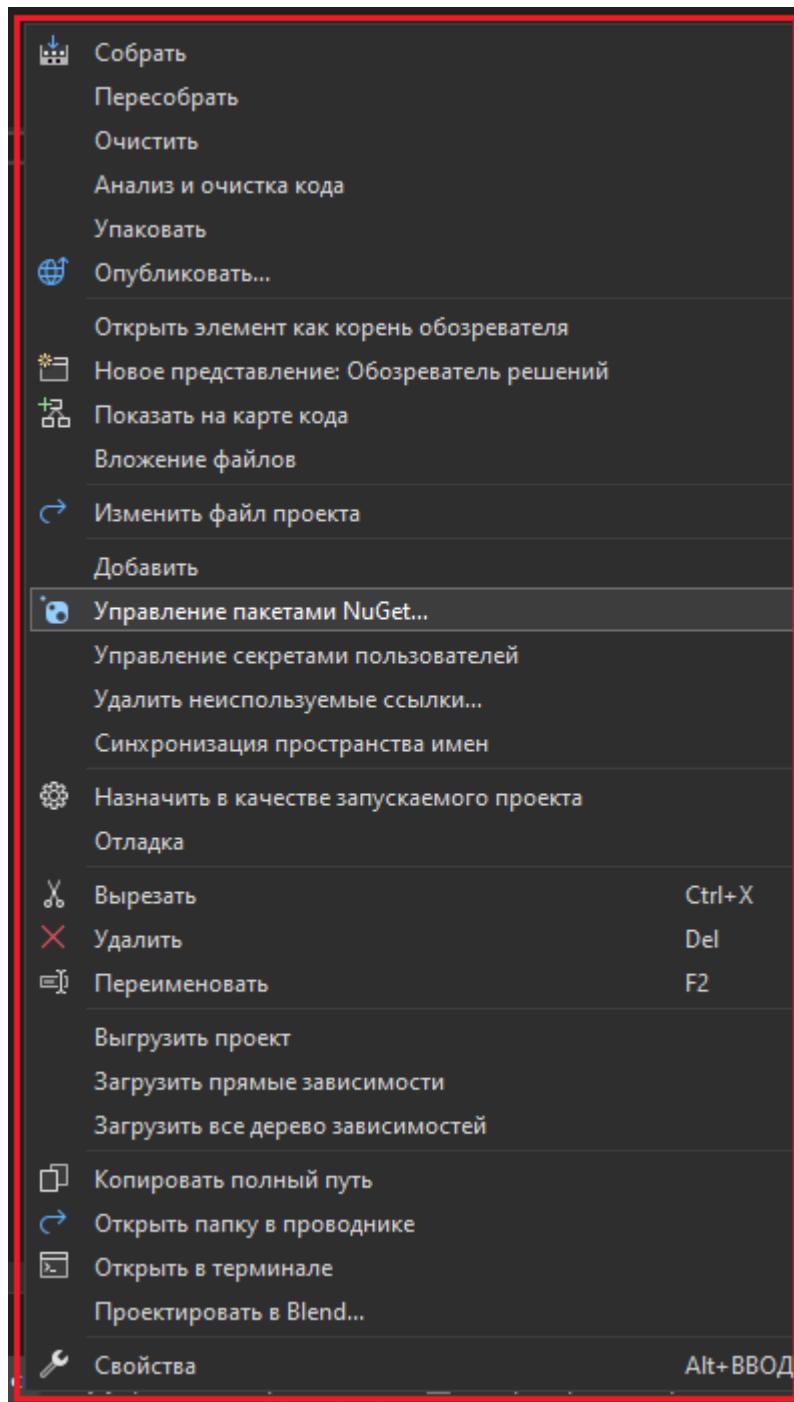
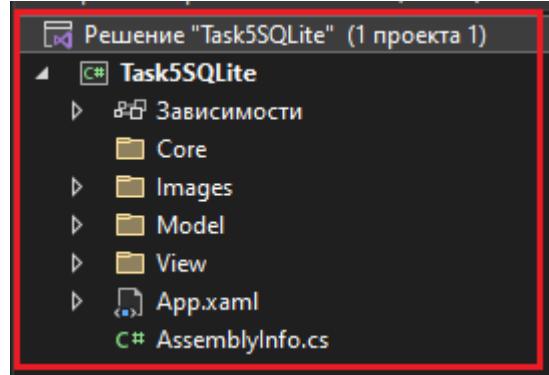
Редактировать

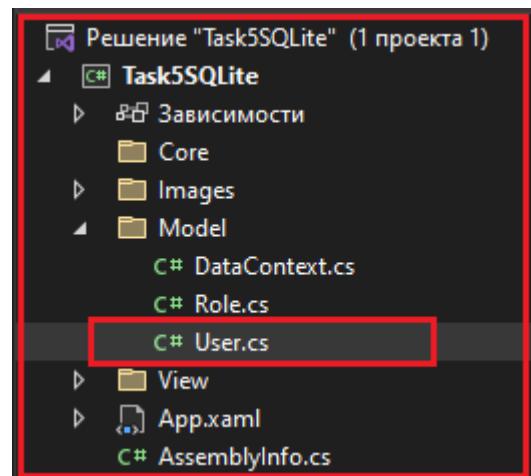
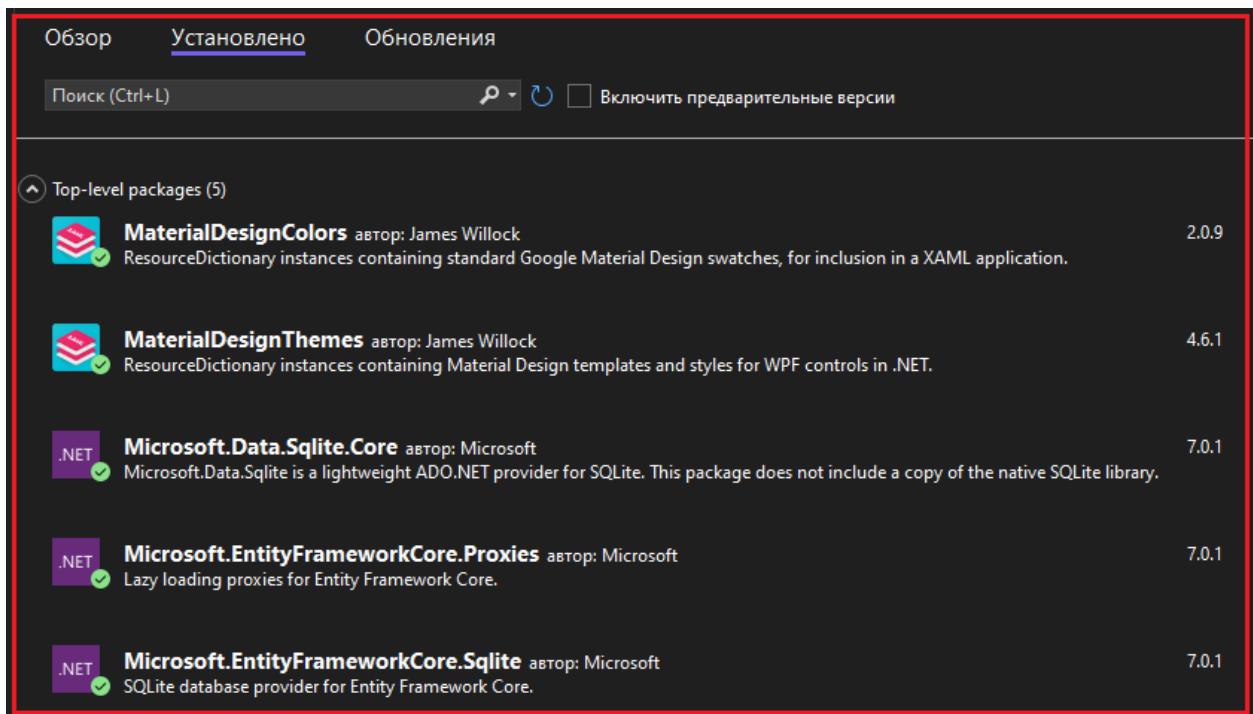
ЛОГИН

ПАРОЛЬ

ЭЛ. ПОЧТА

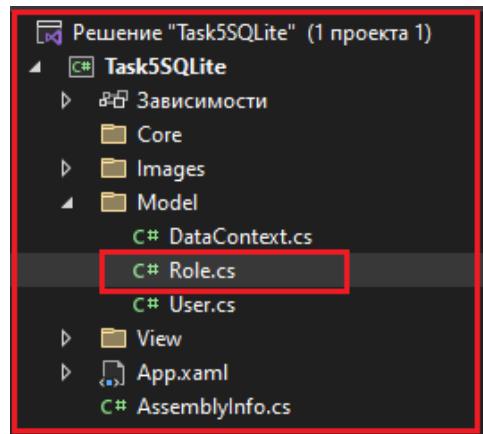
[Создать](#) [Прочитать](#) [Обновить](#) [Удалить](#)





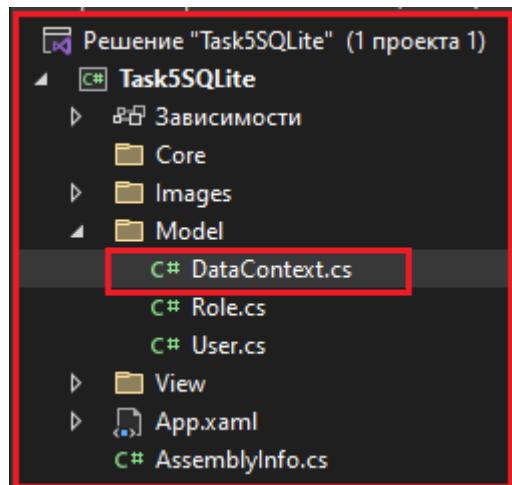
```
Ссылок: 10
public class User
{
    [Key]
    Ссылок: 3
    public int UserID { get; set; }
    Ссылок: 2
    public string Login { get; set; }
    Ссылок: 2
    public string Password { get; set; }
    Ссылок: 2
    public string Email { get; set; }

    Ссылок: 0
    public virtual ICollection<Role> Roles { get; private set; } = new ObservableCollection<Role>();
}
```

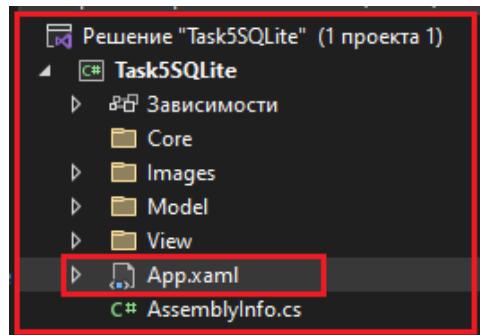


```
public class Role
{
    [Key]
    public int RoleID { get; set; }
    public string RoleName { get; set; }

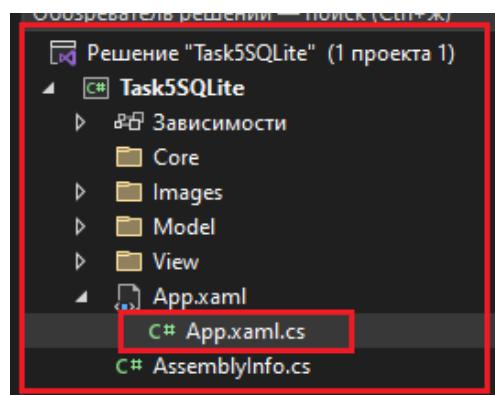
    Ссылок 0
    public int UserID { get; set; }
    Ссылок 0
    public virtual User User { get; set; }
}
```



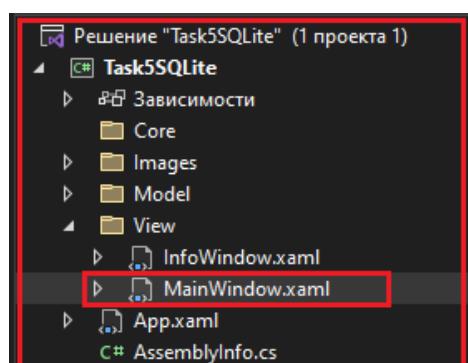
```
Ссылок: 9
public class DataContext : DbContext
{
    Ссылок: 5
    public DbSet<User> Users { get; set; }
    Ссылок: 0
    public DbSet<Role> Roles { get; set; }
    Ссылок: 0
    protected override void OnConfiguring(DbContextOptionsBuilder optionsBuilder)
    {
        optionsBuilder.UseSqlite("Data Source = Task5SQLite.db");
        optionsBuilder.UseLazyLoadingProxies();
    }
}
```



```
<Application x:Class="Task5SQLite.App"  
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"  
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"  
    xmlns:materialDesign="http://materialdesigninxaml.net/winfx/xaml/themes"  
    StartupUri="View/MainWindow.xaml">  
  
<Application.Resources>  
    <ResourceDictionary>  
        <ResourceDictionary.MergedDictionaries>  
            <materialDesign:BundledTheme BaseTheme="Light" PrimaryColor="{x:Null}" SecondaryColor="Lime" />  
            <ResourceDictionary Source="pack://application:,,,/MaterialDesignThemes.Wpf;component/Themes/MaterialDesignTheme.Defaults.xaml" />  
        </ResourceDictionary.MergedDictionaries>  
    </ResourceDictionary>  
</Application.Resources>  
</Application>
```



```
Ссылок: 3  
public partial class App : Application  
{  
    Ссылок: 0  
    protected override void OnStartup(StartupEventArgs e)  
    {  
        DatabaseFacade facade = new DatabaseFacade(new DataContext());  
        facade.EnsureCreated();  
    }  
}
```



```
<Window x:Class="Task5SQLite.MainWindow"
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
    xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
    xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
    xmlns:materialDesign="http://materialdesigninxaml.net/winfx/xaml/themes"
    mc:Ignorable="d"
    Height="583"
    Width="842"
    WindowStartupLocation="CenterScreen"
    WindowStyle="None"
    ResizeMode="NoResize"
    Background="#Transparent"
    AllowsTransparency="True"
    FontFamily="Comic Sans MS">

    <Grid Background="#F5F5F5"
        MouseDown="Grid_MouseDown">
        <Grid.ColumnDefinitions>
            <ColumnDefinition Width="329" />
            <ColumnDefinition Width="*" />
        </Grid.ColumnDefinitions>
        <Image Grid.Column="0"
            Source="/Images/main_bg.jpg"/>
        <Border Grid.Column="1"
            HorizontalAlignment="Center"
            VerticalAlignment="Center"
            Width="385"
            Height="405"
            CornerRadius="8"
            Background="#FFFFFF"
            Effect="{StaticResource MaterialDesignElevationShadow24}">
```

```
<Grid>
    <Grid.RowDefinitions>
        <RowDefinition Height="100" />
        <RowDefinition Height="200" />
        <RowDefinition Height="*" />
    </Grid.RowDefinitions>

    <StackPanel Grid.Row="0"
        HorizontalAlignment="Center"
        VerticalAlignment="Center">
        <TextBlock Text="Войти в систему"
            Foreground="#00A551"
            FontWeight="Medium"
            FontSize="20"
            TextAlignment="Center"/>
        <TextBlock Text="Практическая работа №5"
            TextWrapping="Wrap"
            FontWeight="Regular"
            FontSize="12"
            Foreground="#474749"
            Margin="0 20 0 0"/>
    </StackPanel>

    <StackPanel Grid.Row="1"
        Margin="40 0">
        <StackPanel>
            <TextBlock Text="Email"
                Foreground="#7F7E83"
                FontSize="12"
                FontWeight="Regular"/>
        </StackPanel>
```

```

<Border Width="307"
        Height="40"
        CornerRadius="10"
        Background="#F4F4F4"
        Padding="5">
    <TextBox Width="290"
            x:Name="TbLogin"
            Foreground="#00A551"
            HorizontalAlignment="Center"
            VerticalAlignment="Center"
            materialDesign:HintAssist.Hint="Введите адрес электронной почты..."
            materialDesign:TextFieldAssist.HasClearButton="True"
            materialDesign:TextFieldAssist.UnderlineBrush="#F4F4F4"/>
</Border>
</StackPanel>

<StackPanel Margin="0 30 0 0">
    <TextBlock Text="Password"
               Foreground="#7F7E83"
               FontSize="12"
               FontWeight="Regular"/>
    <Border Width="307"
            Height="40"
            CornerRadius="10"
            Background="#F4F4F4"
            Padding="5">
        <PasswordBox Width="290"
                      x:Name="PbPassword"
                      Foreground="#00A551"
                      HorizontalAlignment="Center"
                      VerticalAlignment="Center"
                      materialDesign:HintAssist.Hint="Введите пароль..."
                      materialDesign:TextFieldAssist.HasClearButton="True"
                      materialDesign:TextFieldAssist.UnderlineBrush="#F4F4F4"/>
    </Border>
</StackPanel>
</StackPanel>

```

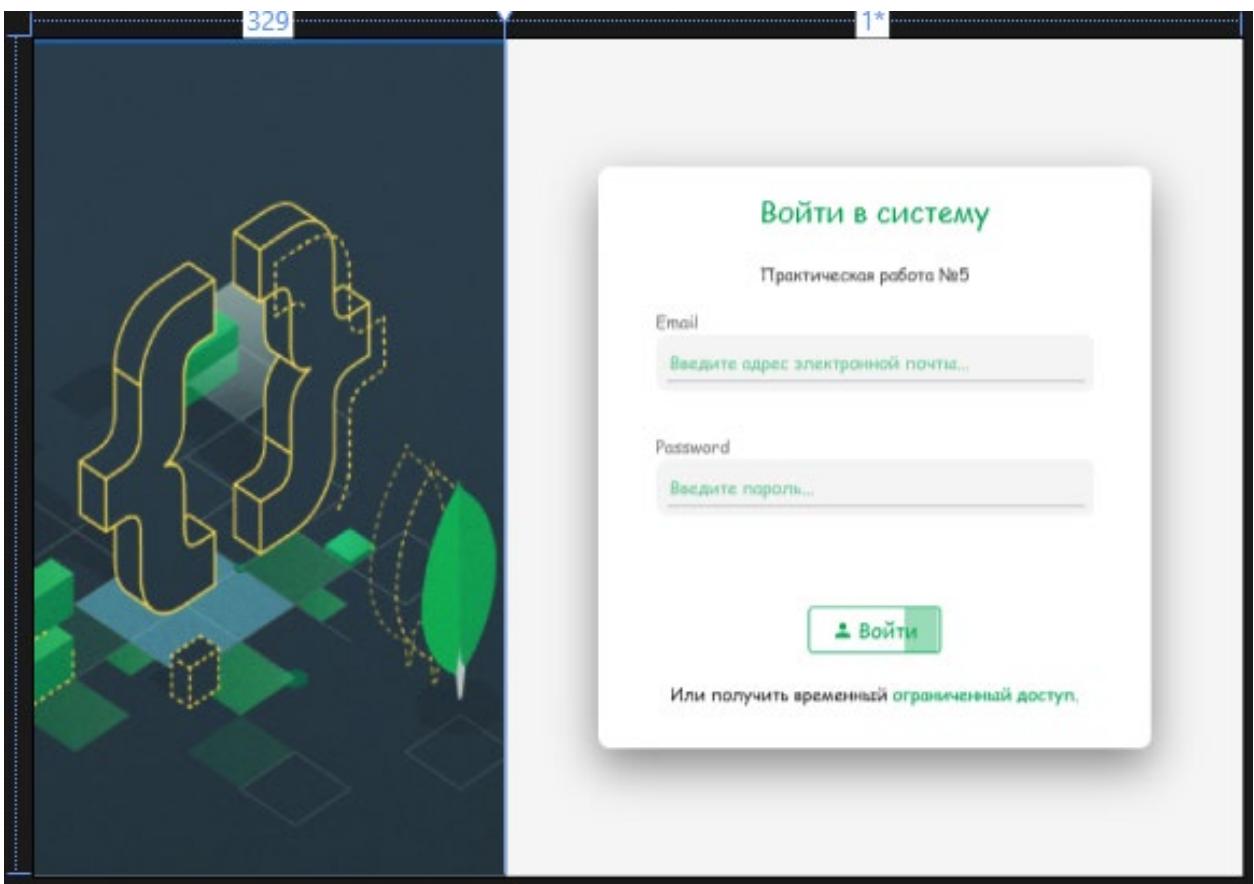
```

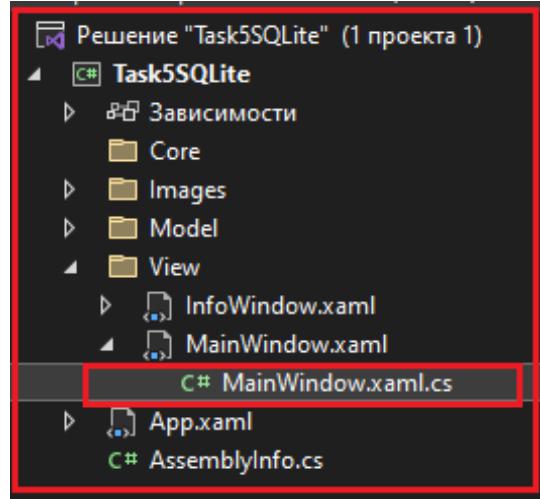
<StackPanel Grid.Row="2"
            HorizontalAlignment="Center"
            VerticalAlignment="Center"
            Margin="0 0 0 60">
    <Button x:Name="BtnLogin"
            Click="BtnLogin_Click"
            Foreground="#00A551"
            Background="Transparent"
            BorderBrush="#00A551"
            Style="{StaticResource MaterialDesignOutlinedButton}"
            materialDesign:ButtonProgressAssist.Value="-1"
            materialDesign:ButtonProgressAssist.IndicatorForeground="#00A551"
            materialDesign:ButtonProgressAssist.IndicatorBackground="Transparent"
            materialDesign:ButtonProgressAssist.IsIndicatorVisible="True"
            materialDesign:ButtonProgressAssist.IsIndeterminate="True"
            IsEnabled="{Binding DataContext.ControlsEnabled,
                           RelativeSource={RelativeSource FindAncestor, AncestorType=Window}}">
        <StackPanel Orientation="Horizontal">
            <materialDesign:PackIcon Kind="Person"
                                     Margin="0 2 3 0"/>
            <TextBlock Text="Войти"/>
        </StackPanel>
    </Button>
</StackPanel>

```

```
<materialDesign:PackIcon Kind="Person" Margin="0 2 3 0"/>
<TextBlock Text="Войти" />
</StackPanel>
</Button>
</StackPanel>

<TextBlock Grid.Row="2"
    Margin="0 30 0 0"
    HorizontalAlignment="Center"
    VerticalAlignment="Center">
    <Run>Или получить временный</Run>
    <Run Foreground="#00A551">ограниченный доступ.</Run>
    <Run.Style>
        <Style TargetType="Run">
            <Style.Triggers>
                <Trigger Property="IsMouseOver" Value="True">
                    <Setter Property="TextDecorations" Value="Underline" />
                    <Setter Property="Cursor" Value="Hand" />
                </Trigger>
            </Style.Triggers>
        </Style>
    </Run.Style>
</Run>
</TextBlock>
</Grid>
</Border>
</Grid>
```

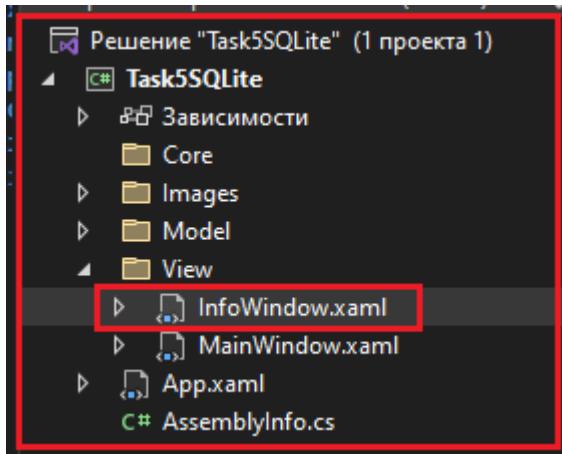




```
Ссылка 2
public partial class MainWindow : Window
{
    Ссылка 0
    public MainWindow()
    {
        InitializeComponent();
    }

    Ссылка 1
    private void Grid_MouseDown(object sender, MouseButtonEventArgs e)
    {
        if (e.ClickCount == 2)
        {
            Application.Current.Shutdown();
        }
    }

    Ссылка 1
    private void BtnLogin_Click(object sender, RoutedEventArgs e)
    {
        new InfoWindow().Show();
        Close();
    }
}
```



```
B] <Window x:Class="Task5SQLite.View.InfoWindow"
B]   xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
B]   xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
B]   xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
B]   xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
B]   xmlns:materialDesign="http://materialdesigninxaml.net/winfx/xaml/themes"
B]   xmlns:local="clr-namespace:Task5SQLite.View"
B]   mc:Ignorable="d"
B]   Height="583"
B]   Width="842"
B]   WindowStartupLocation="CenterScreen"
B]   WindowStyle="None"
B]   ResizeMode="NoResize"
B]   Background="#F5F5F5"
B]   AllowsTransparency="True"
B]   FontFamily="Comic Sans MS">
B]     <Grid Background="#F5F5F5">
B]       <ListView x:Name="LVInfo"
B]         Margin="5 20"
B]         Height="195"
B]         VerticalAlignment="Top">
B]           <ListView.ContextMenu>
B]             <ContextMenu>
B]               <MenuItem Header="Очистить"
B]                 Click="MenuItem_Click"/>
B]             </ContextMenu>
B]           </ListView.ContextMenu>
B]         </ListView>
B]       </Grid>
B]     </Window>
```

```
<ListView.View>
  <GridView>
    <GridViewColumn Header="ID"
      Width="Auto"
      DisplayMemberBinding="{Binding UserID}"/>
    <GridViewColumn Header="ЛОГИН"
      Width="Auto"
      DisplayMemberBinding="{Binding Login}"/>
    <GridViewColumn Header="ПАРОЛЬ"
      Width="Auto"
      DisplayMemberBinding="{Binding Password}"/>
    <GridViewColumn Header="ЭЛ. ПОЧТА"
      Width="Auto"
      DisplayMemberBinding="{Binding Email}"/>
  </GridView>
</ListView.View>
</ListView>

<CheckBox x:Name="CbEnable"
  Background="#00A551"
  Content="Редактировать"
  HorizontalAlignment="Left"
  VerticalAlignment="Top"
  Cursor="Hand"
  Margin="10 230 0 0"/>
```

```
<Grid Name="GridEdit"
      Margin="3 280 0 0"
      HorizontalAlignment="Stretch"
      VerticalAlignment="Top"
      IsEnabled="{Binding ElementName=CbEnable, Path=IsChecked}">
<Grid.ColumnDefinitions>
    <ColumnDefinition Width="100"/>
    <ColumnDefinition Width="*" />
</Grid.ColumnDefinitions>
<Label Content="ЛОГИН"
       Grid.Column="0"
       HorizontalAlignment="Left"
       Margin="3 0 0 0"
       VerticalAlignment="Top"/>

<Label Content="ПАРОЛЬ"
       Grid.Column="0"
       HorizontalAlignment="Left"
       Margin="3 40 0 0"
       VerticalAlignment="Top"/>

<Label Content="ЭЛ. ПОЧТА"
       Grid.Column="0"
       HorizontalAlignment="Left"
       Margin="3 80 0 0"
       VerticalAlignment="Top"/>

<TextBox x:Name="TbLogin"
          Text="{Binding ElementName=LVInfo, Path=SelectedItem.Login, Mode=OneWay}"
          Grid.Column="1"
          HorizontalAlignment="Left"
          Width="250"
          Height="26"
          VerticalAlignment="Top"
          Foreground="#00A551"
          materialDesign:TextFieldAssist.UnderlineBrush="#00A551"/>
```

```
<TextBox x:Name="TbPassword"
          Text="{Binding ElementName=LVInfo, Path=SelectedItem.Password, Mode=OneWay}"
          Grid.Column="1"
          HorizontalAlignment="Left"
          Margin="0 40 0 0"
          Width="250"
          Height="26"
          VerticalAlignment="Top"
          Foreground="#00A551"
          materialDesign:TextFieldAssist.UnderlineBrush="#00A551"/>

<TextBox x:Name="TbEmail"
          Text="{Binding ElementName=LVInfo, Path=SelectedItem.Email, Mode=OneWay}"
          Grid.Column="1"
          HorizontalAlignment="Left"
          Margin="0 80 0 0"
          Width="250"
          Height="26"
          VerticalAlignment="Top"
          Foreground="#00A551"
          materialDesign:TextFieldAssist.UnderlineBrush="#00A551"/>

</Grid>
```

```
<StackPanel Margin="10 360 0 0"
            Orientation="Horizontal">
    <Button x:Name="BtnCreate"
            Click="BtnCreate_Click"
            HorizontalAlignment="Left"
            Margin="10 0 20 0"
            Foreground="#00A551"
            Background="Transparent"
            BorderBrush="#00A551"
            Style="{StaticResource MaterialDesignOutlinedButton}"
            materialDesign:ButtonProgressAssist.Value="-1"
            materialDesign:ButtonProgressAssist.IndicatorForeground="#00A551"
            materialDesign:ButtonProgressAssist.IndicatorBackground="Transparent"
            materialDesign:ButtonProgressAssist.IsIndicatorVisible="True"
            materialDesign:ButtonProgressAssist.IsIndeterminate="True"
            IsEnabled="{Binding DataContext.ControlsEnabled,
                           RelativeSource={RelativeSource FindAncestor, AncestorType=Window}}">
        <StackPanel Orientation="Horizontal">
            <materialDesign:PackIcon Kind="Create"
                Margin="0 2 3 0"/>
            <TextBlock Text="Создать"/>
        </StackPanel>
    </Button>
```

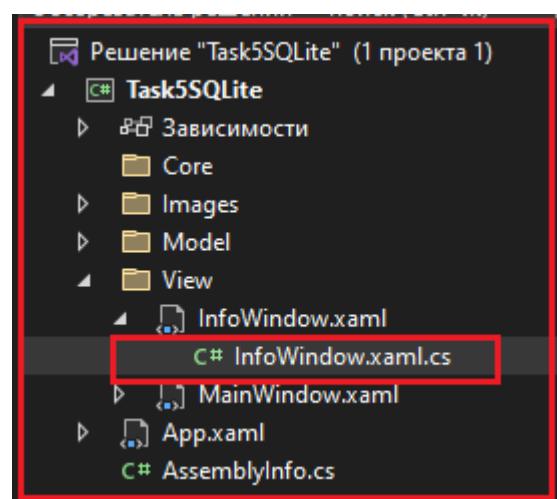
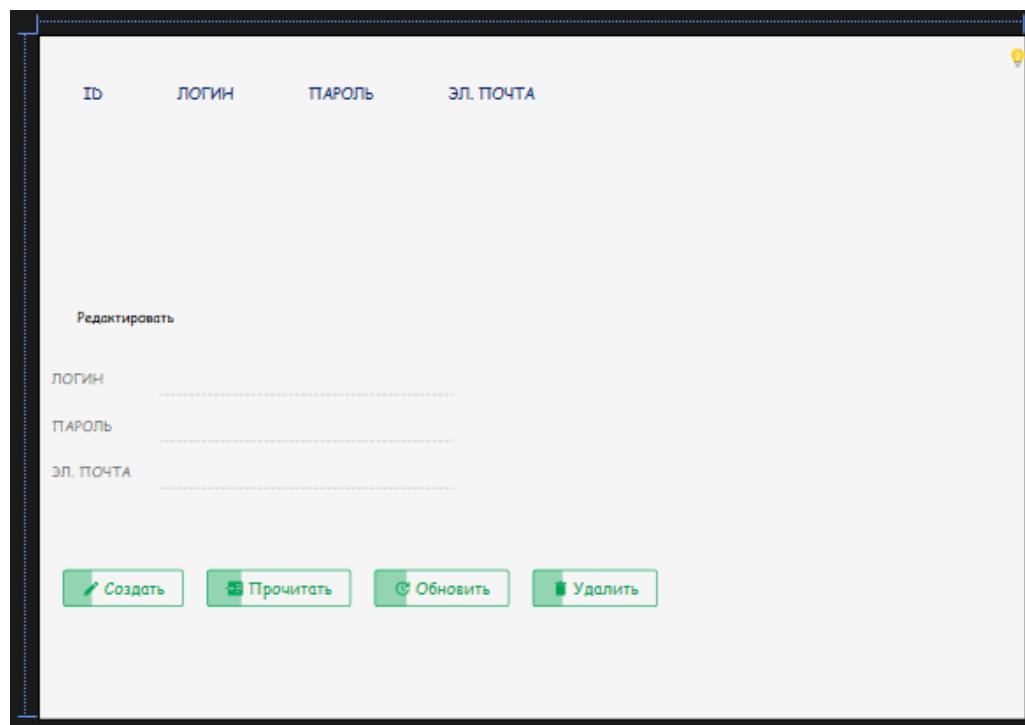
```
<Button x:Name="BtnRead"
            Click="BtnRead_Click"
            Margin="0 0 20 0"
            HorizontalAlignment="Left"
            Foreground="#00A551"
            Background="Transparent"
            BorderBrush="#00A551"
            Style="{StaticResource MaterialDesignOutlinedButton}"
            materialDesign:ButtonProgressAssist.Value="-1"
            materialDesign:ButtonProgressAssist.IndicatorForeground="#00A551"
            materialDesign:ButtonProgressAssist.IndicatorBackground="Transparent"
            materialDesign:ButtonProgressAssist.IsIndicatorVisible="True"
            materialDesign:ButtonProgressAssist.IsIndeterminate="True"
            IsEnabled="{Binding DataContext.ControlsEnabled,
                           RelativeSource={RelativeSource FindAncestor, AncestorType=Window}}">
        <StackPanel Orientation="Horizontal">
            <materialDesign:PackIcon Kind="ReadMore"
                Margin="0 2 3 0"/>
            <TextBlock Text="Прочитать"/>
        </StackPanel>
    </Button>
```

```
<Button x:Name="BtnUpdate"
            Click="BtnUpdate_Click"
            HorizontalAlignment="Left"
            Margin="0 0 20 0"
            Foreground="#00A551"
            Background="Transparent"
            BorderBrush="#00A551"
            Style="{StaticResource MaterialDesignOutlinedButton}"
            materialDesign:ButtonProgressAssist.Value="-1"
            materialDesign:ButtonProgressAssist.IndicatorForeground="#00A551"
            materialDesign:ButtonProgressAssist.IndicatorBackground="Transparent"
            materialDesign:ButtonProgressAssist.IsIndicatorVisible="True"
            materialDesign:ButtonProgressAssist.IsIndeterminate="True"
            IsEnabled="{Binding DataContext.ControlsEnabled,
                           RelativeSource={RelativeSource FindAncestor, AncestorType=Window}}">
        <StackPanel Orientation="Horizontal">
            <materialDesign:PackIcon Kind="Update"
                Margin="0 2 3 0"/>
            <TextBlock Text="Обновить"/>
        </StackPanel>
    </Button>
```

```

<Button x:Name="BtnDelete"
        Click="BtnDelete_Click"
        HorizontalAlignment="Left"
        Foreground="#00A551"
        Background="Transparent"
        BorderBrush="#00A551"
        Style="{StaticResource MaterialDesignOutlinedButton}"
        materialDesign:ButtonProgressAssist.Value="-1"
        materialDesign:ButtonProgressAssist.IndicatorForeground="#00A551"
        materialDesign:ButtonProgressAssist.IndicatorBackground="Transparent"
        materialDesign:ButtonProgressAssist.IsIndicatorVisible="True"
        materialDesign:ButtonProgressAssist.IsIndeterminate="True"
        IsEnabled="{Binding DataContext.ControlsEnabled,
                    RelativeSource={RelativeSource FindAncestor, AncestorType=Window}}">
    <StackPanel Orientation="Horizontal">
        <materialDesign:PackIcon Kind="Trash"
            Margin="0 2 3 0"/>
        <TextBlock Text="Удалить"/>
    </StackPanel>
</Button>
</StackPanel>
</Grid>

```



```
Ссылка: 3
public partial class InfoWindow : Window
{
    Ссылка: 2
    public List<User> DatabaseUsers { get; private set; }

    Ссылка: 1
    public InfoWindow()
    {
        InitializeComponent();
        Read();
    }

    Ссылка: 1
    public void Create()
    {
        using (DataContext db = new DataContext())
        {
            var login = TbLogin.Text;
            var password = TbPassword.Text;
            var email = TbEmail.Text;
        }
    }
}
```

```
try
{
    if (string.IsNullOrEmpty(login) ||
        string.IsNullOrEmpty(password) ||
        string.IsNullOrEmpty(email))
    {
        MessageBox.Show("Ошибка ввода данных",
                        "Системное сообщение",
                        MessageBoxButton.OK,
                        MessageBoxIcon.Error);
    }
    else
    {
        db.Users.Add(new User()
        {
            Login = login,
            Password = password,
            Email = email
        });
        db.SaveChanges();
    }
}
```

```
        catch (Exception ex)
        {
            MessageBox.Show(ex.Message.ToString(),
                           "Системное сообщение",
                           MessageBoxButtons.OK,
                           MessageBoxIcon.Error);
        }
    }

Ссылок: 4
public void Read()
{
    using (DataContext db = new DataContext())
    {
        DatabaseUsers = db.Users.ToList();
        LVInfo.ItemsSource = DatabaseUsers;
    }
}

Ссылок: 1
public void Update()
{
    using (DataContext db = new DataContext())
    {
        User? selectedUser = LVInfo.SelectedItem as User;

        var login = TbLogin.Text;
        var password = TbPassword.Text;
        var email = TbEmail.Text;
    }
}
```

```
try
{
    if (string.IsNullOrEmpty(login) ||
        string.IsNullOrEmpty(password) ||
        string.IsNullOrEmpty(email))
    {
        MessageBox.Show("Ошибка ввода данных",
                       "Системное сообщение",
                       MessageBoxButtons.OK,
                       MessageBoxIcon.Error);
    }
    else
    {
        User user = db.Users.Find(selectedUser.UserID);
        user.Login = login;
        user.Password = password;
        user.Email = email;

        db.SaveChanges();
        Read();
    }
}
catch (Exception ex)
{
    MessageBox.Show(ex.Message.ToString(),
                   "Системное сообщение",
                   MessageBoxButtons.OK,
                   MessageBoxIcon.Error);
}
```

```
Ссылка 1
public void Delete()
{
    using (DataContext db = new DataContext())
    {
        User selectedUser = LVInfo.SelectedItem as User;

        if (selectedUser != null)
        {
            User? user = db.Users.Single(f => f.UserID == selectedUser.UserID);
            db.Users.Remove(user);
            db.SaveChanges();
            Read();
        }
    }
}

Ссылка 1
private void BtnCreate_Click(object sender, RoutedEventArgs e)
{
    Create();
}
```

```
Ссылка 1
private void BtnRead_Click(object sender, RoutedEventArgs e)
{
    Read();
}
```

```
Ссылка 1
private void BtnUpdate_Click(object sender, RoutedEventArgs e)
{
    Update();
}
```

```
Ссылка 1
private void BtnDelete_Click(object sender, RoutedEventArgs e)
{
    Delete();
}
```

```
Ссылка 1
private void MenuItem_Click(object sender, RoutedEventArgs e)
{
    LVInfo.Items.Clear();
}
```