Software Engineering Lab

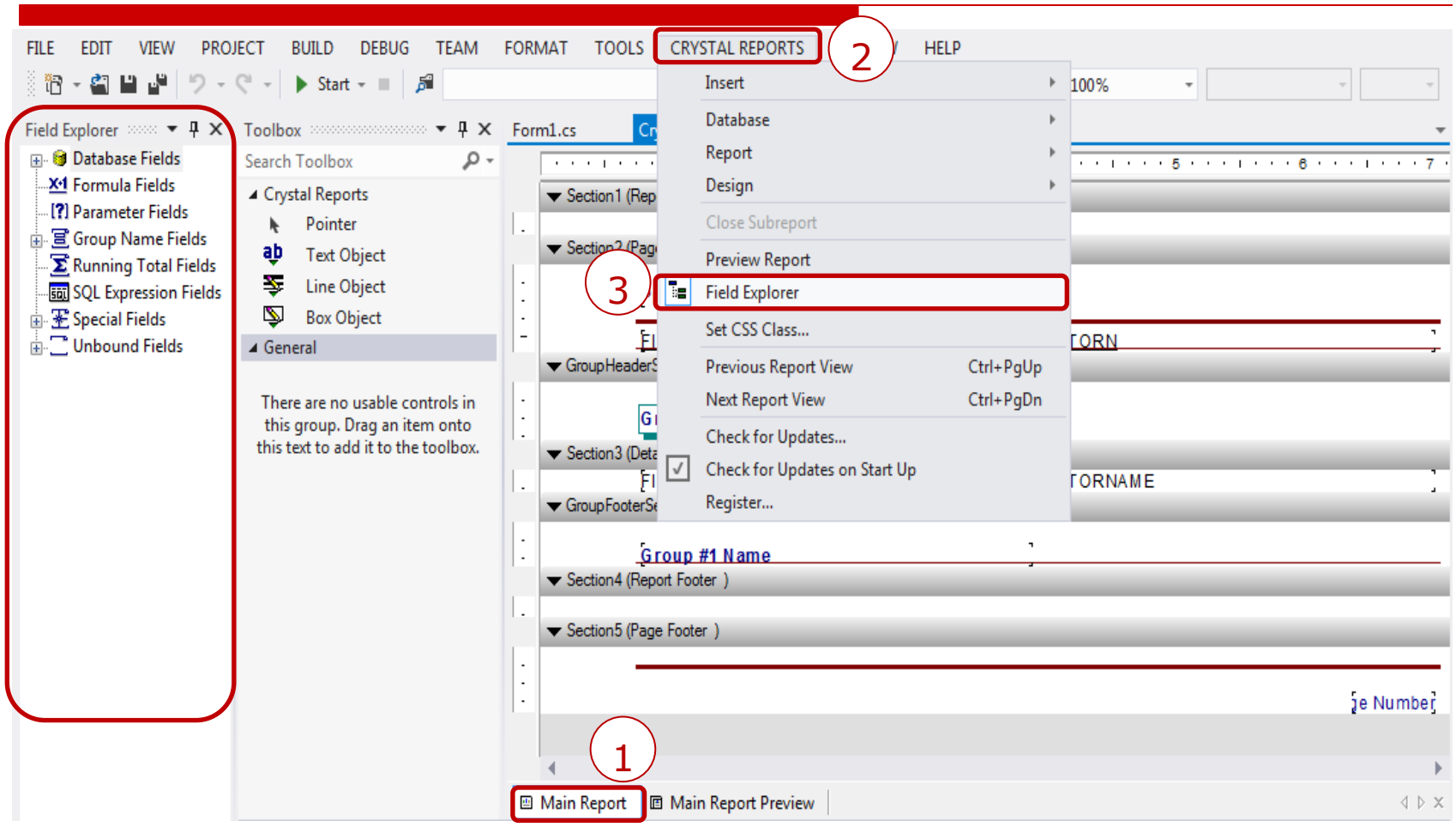# Crystal Reports – Part2

Lab 6

Agenda

- ☐ Crystal Reports with Parameters
- ☐ Date to Date Crystal Reports
- ☐ Passing Parameter Values From C# Form To The Crystal Report
- ☐ Adding Formula to Crystal Reports
- ☐ Adding Summary Field to the Report Footer

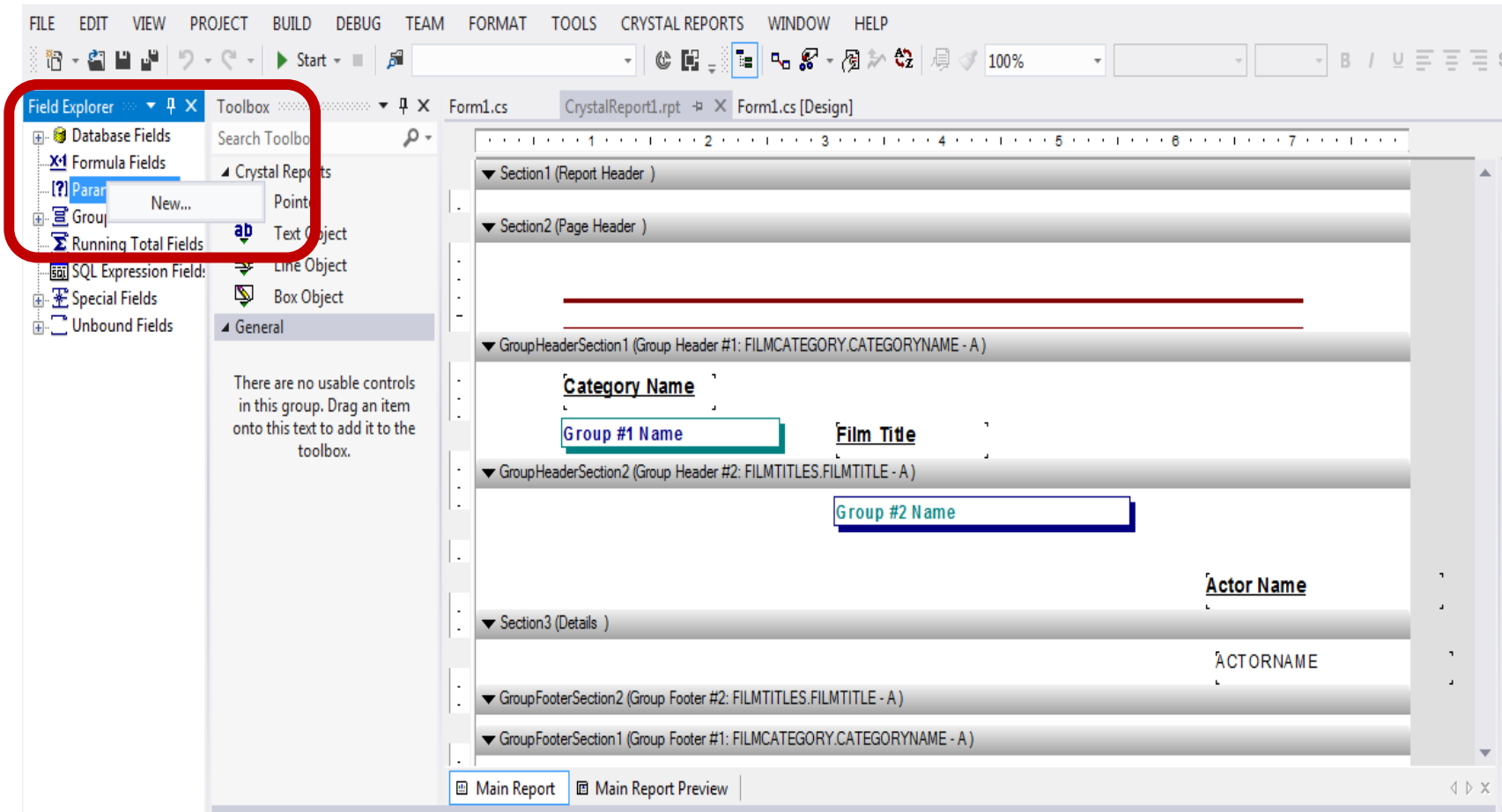# Crystal Reports with Parameters

Crystal Reports with parameters

- Pass a Category Name as a string parameter to get a report that displays the names of all the movies for this Category Name and the names of the actors for these movies.

- To create a new parameter in Crystal report designer window.

  - Open the Main Report tab then Select the Field Explorer from Crystal Report Menu.

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

- **Name**
  - The parameter name which will be linked to a table column to filter the report data.
- **Type**
  - Parameter data type
  - It must match the data type of the column that will be linked to the parameter to filter the data
- **List of values**
  - Add a pre-defined list of values to the parameter so that user can choose among these values
  - Static means the values in the list will never change.
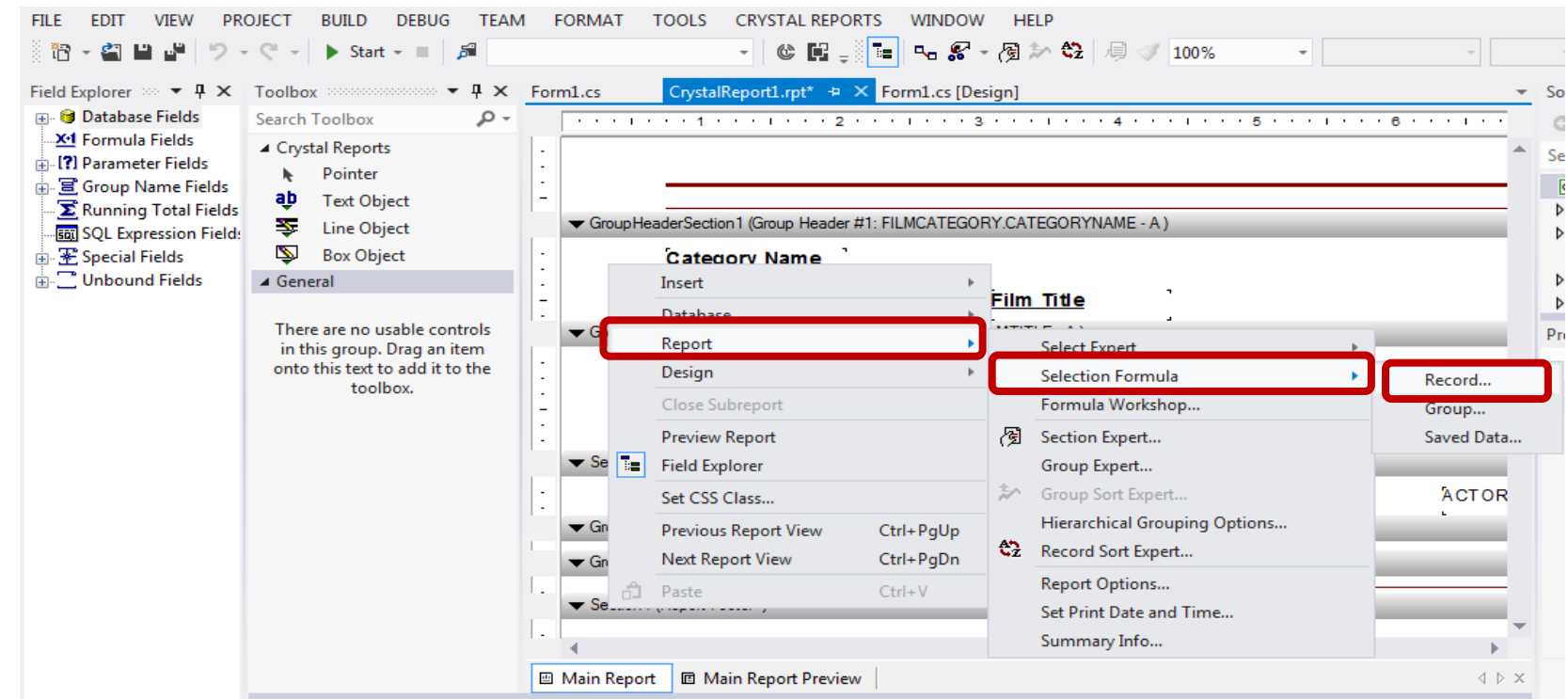- **Value field**
  - Fill the list with a set of values found in a certain column in the database
- **Append all database values**
  - Add all values which exist currently in the selected column to the list of values of the parameter

Crystal Reports with parameters(cont'd)

☐ After creating the parameter, it should be linked to a database column in a condition to filter the report data

Crystal Reports with parameters(cont'd)
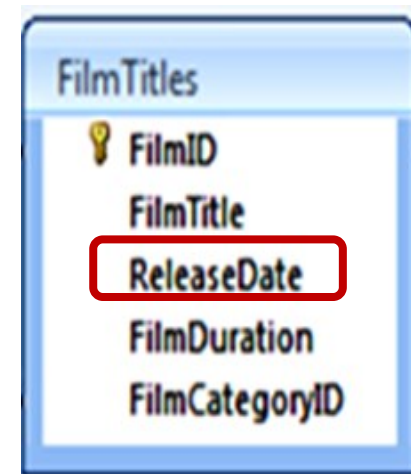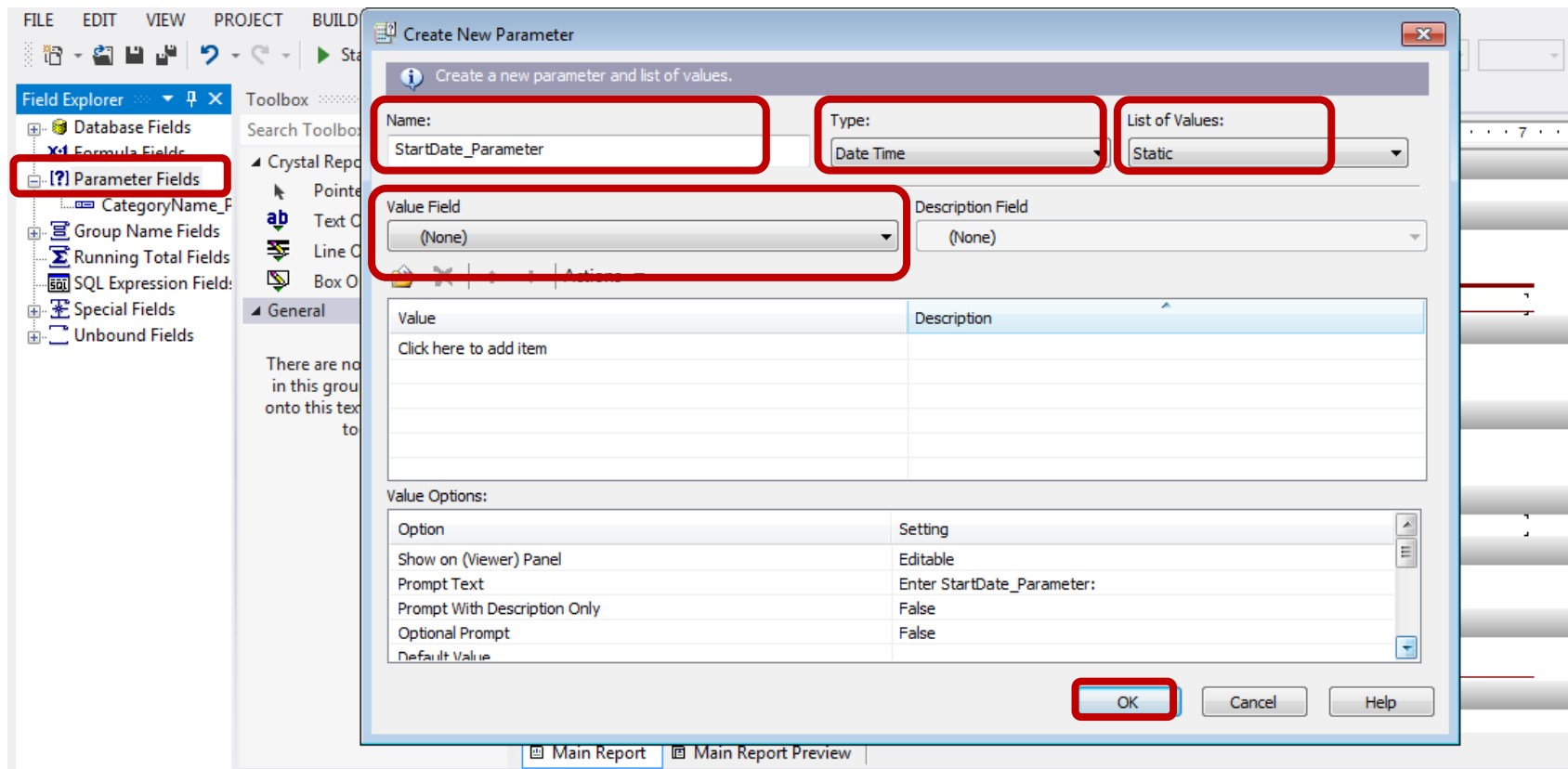
Date to Date
Crystal Reports

Date to Date Crystal Reports

□ Pass Start Date, End Date and Category Name parameters to get a report that displays the names of all the movies for the selected category name whose Release Date is between the Start Date parameter and the End Date parameter and the names of the actors for these movies.
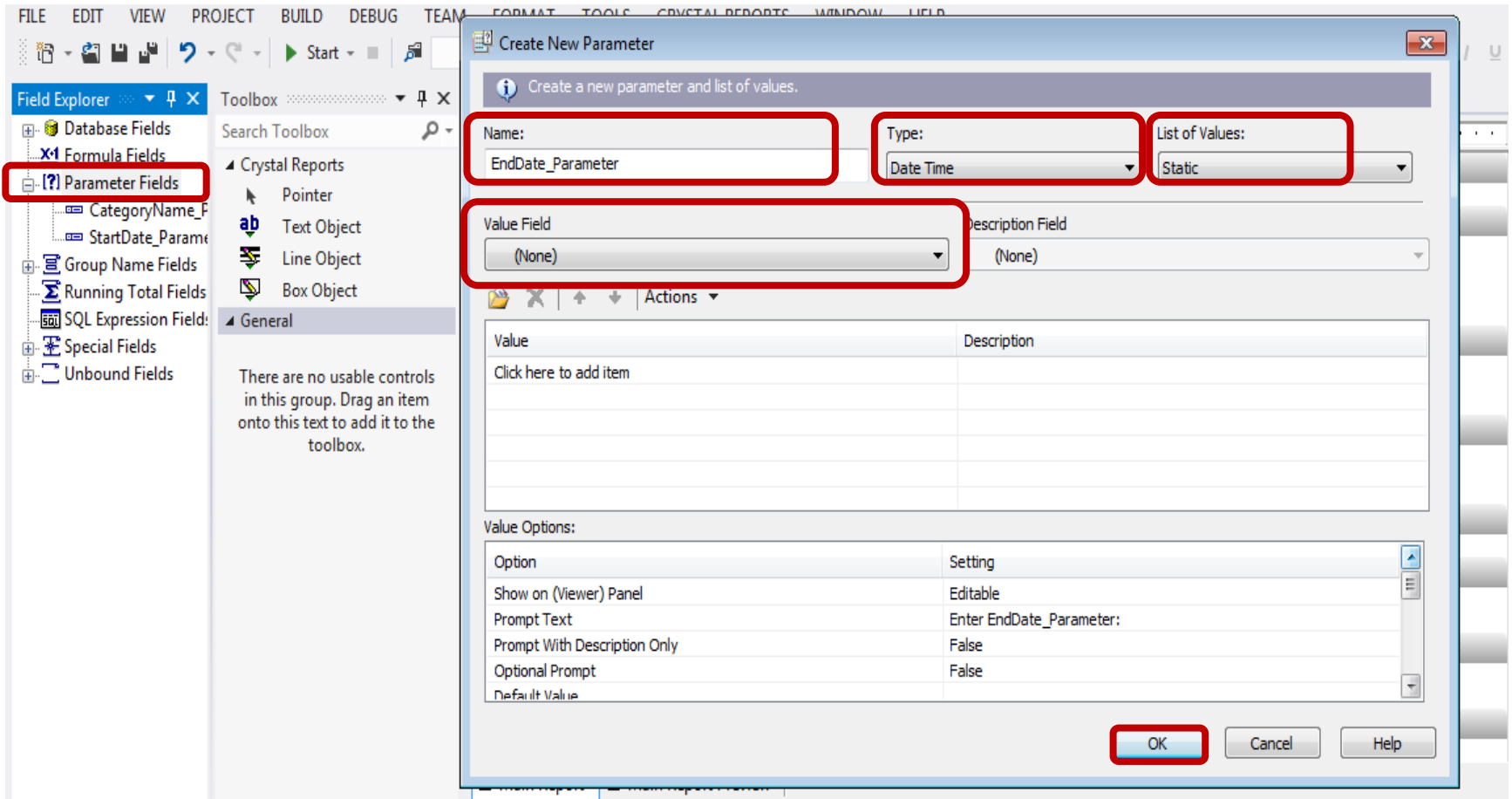
FilmTitles
- 🔑 FilmID
- FilmTitle
- ReleaseDate
- FilmDuration
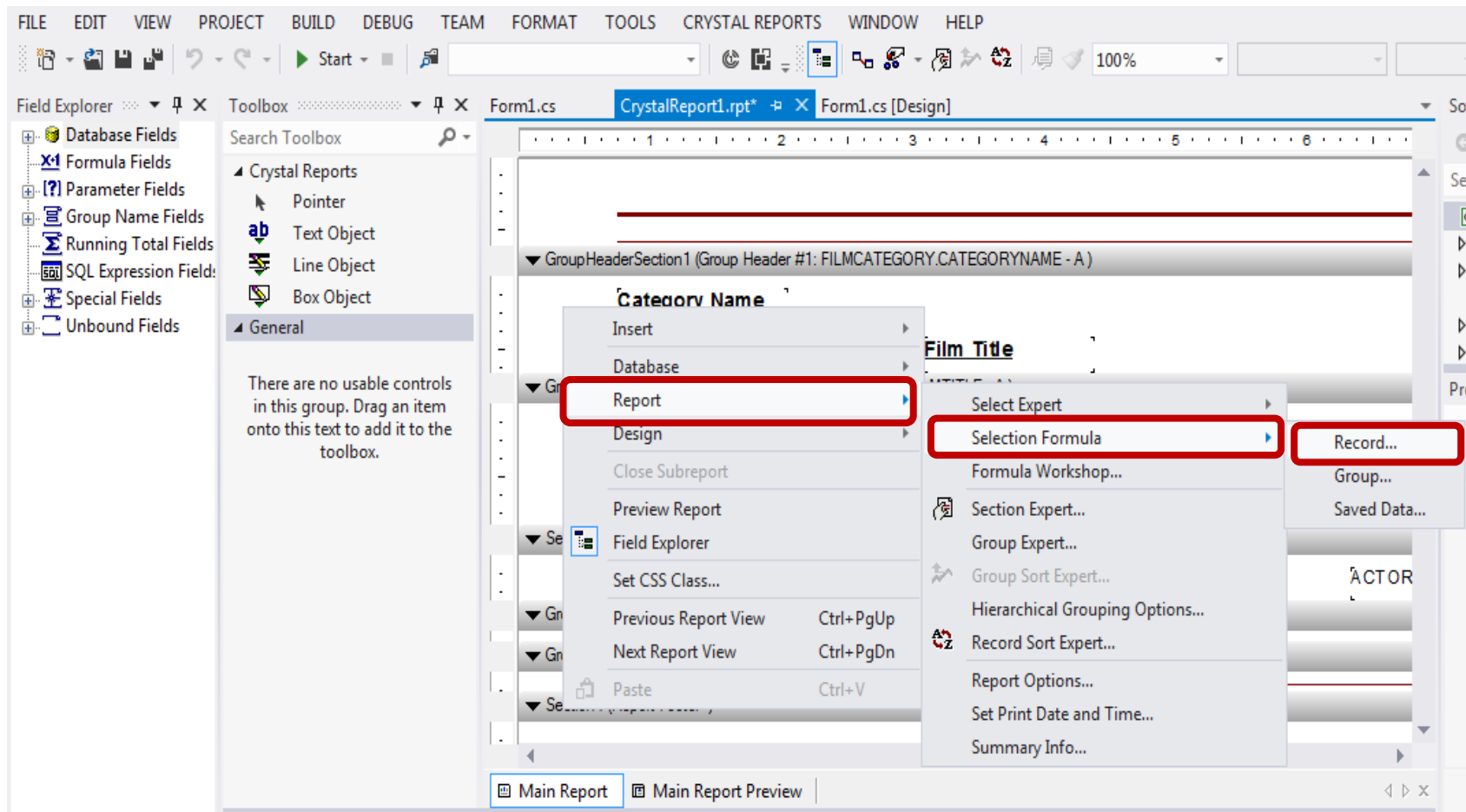- FilmCategoryID

Date to Date Crystal Reports(cont'd)

☐ Creating two date parameters (date from and date to).

Date to Date Crystal Reports(cont'd)

Date to Date Crystal Reports(cont'd)

Date to Date Crystal Reports(cont'd)

Crystal reports with parameters
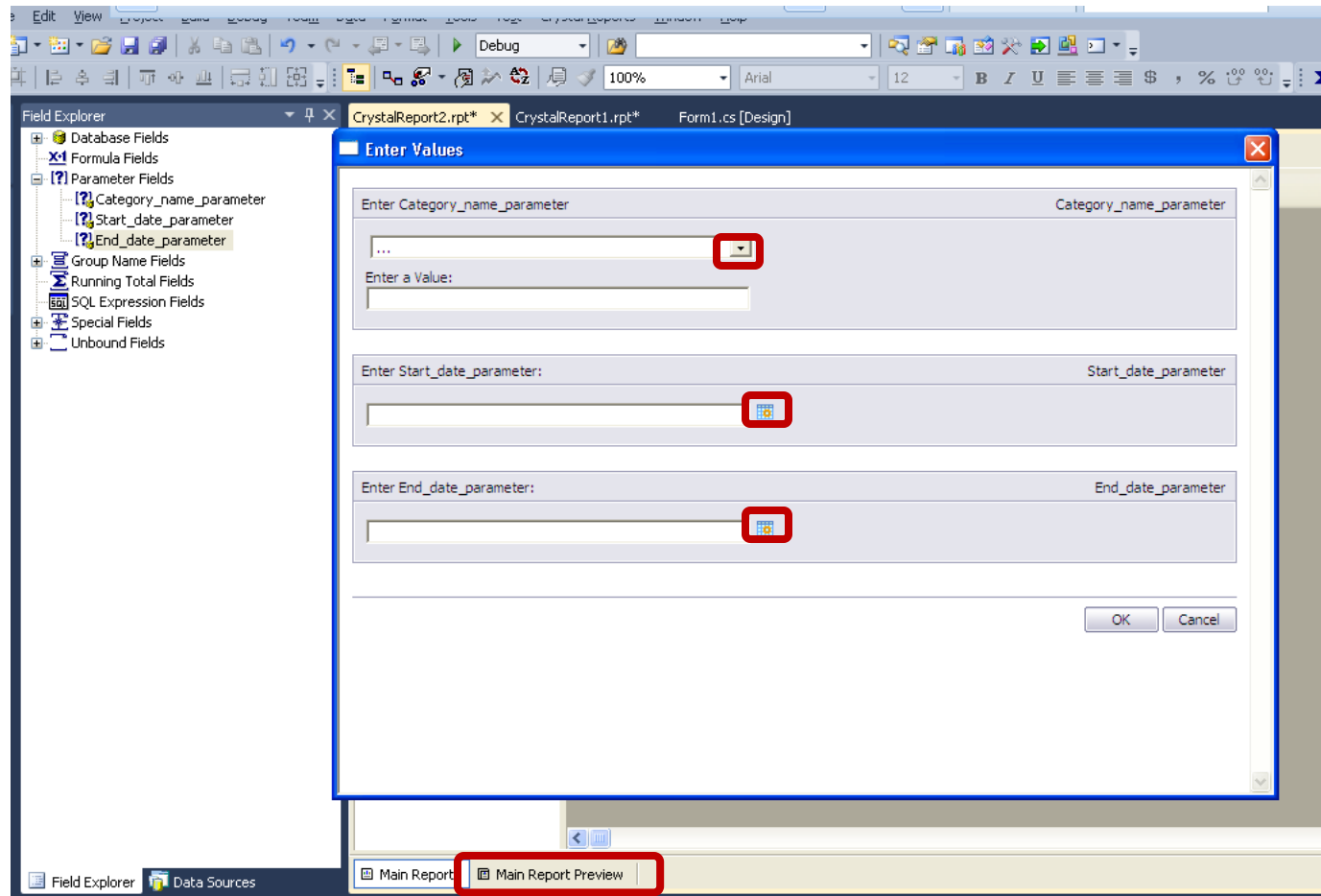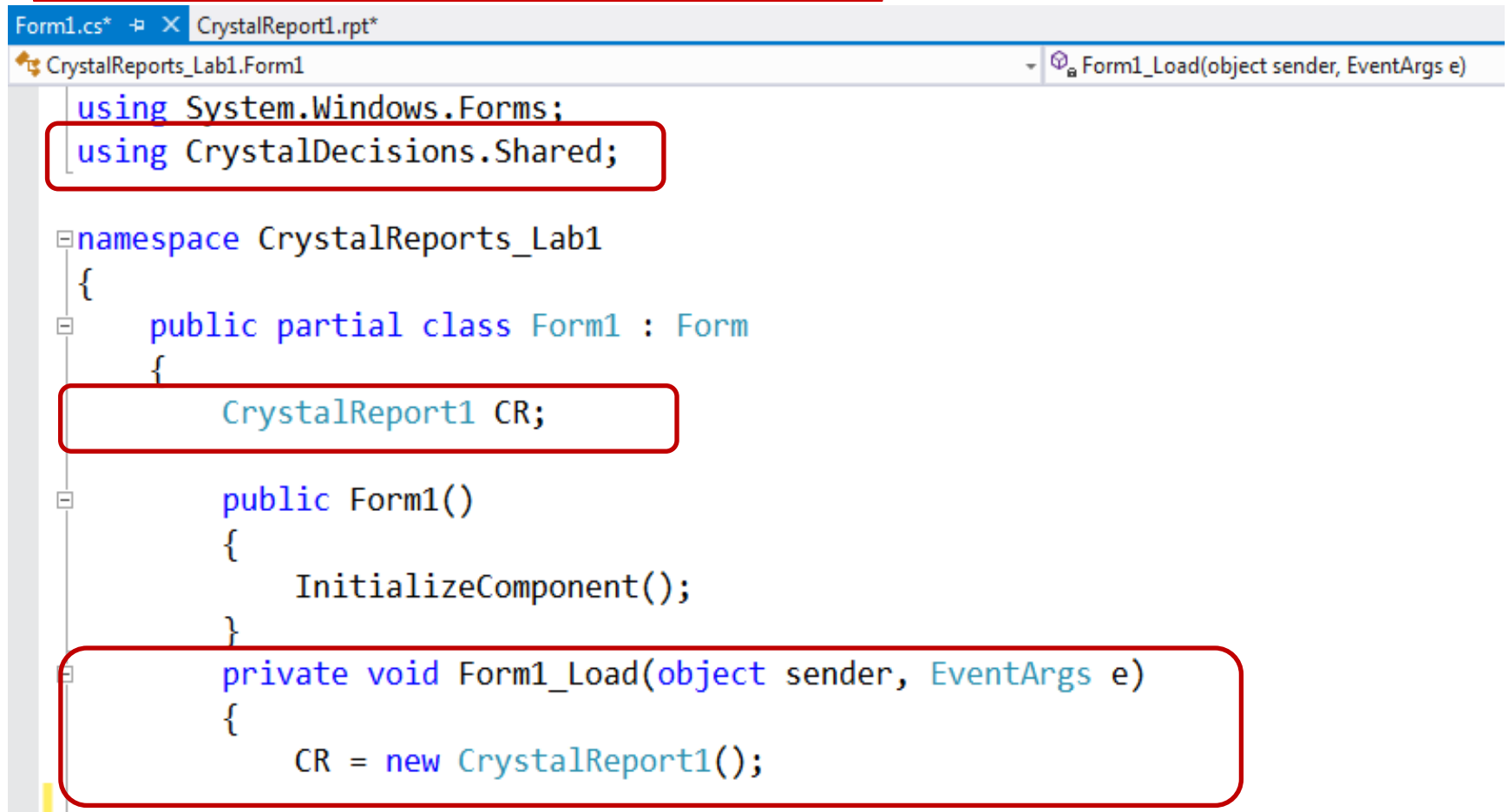
Crystal Reports with parameters(cont'd)
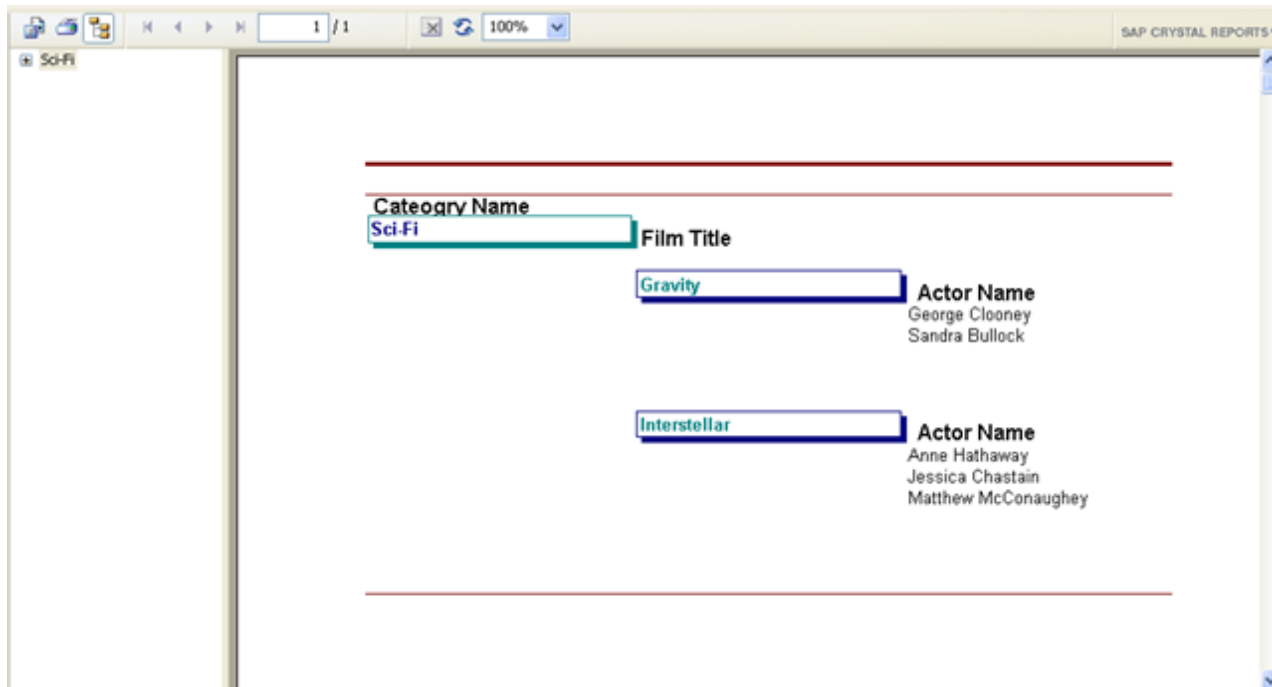
Passing Parameter Values From C# Form to the Crystal Report

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

```
Form1.cs*  X  CrystalReport1.rpt*
CrystalReports_Lab1.Form1                                    Form1_Load(object sender, EventArgs e)

    using System.Windows.Forms;
    using CrystalDecisions.Shared;

    namespace CrystalReports_Lab1
    {
        public partial class Form1 : Form
        {
            CrystalReport1 CR;

            public Form1()
            {
                InitializeComponent();
            }
            private void Form1_Load(object sender, EventArgs e)
            {
                CR = new CrystalReport1();
```

23

Crystal Reports with parameters(cont'd)


```
Form1.cs*  ⇄ ×  CrystalReport1.rpt        Form1.cs [Design]*
⚙ CrystalReports_Lab1.Form1                                    ⌄  ⚙ GenerateReport_btn_Click(object sender, EventArgs e)

        {
            InitializeComponent();
        }

        private void Form1_Load(object sender, EventArgs e)
        {
            CR = new CrystalReport1();
            foreach (ParameterDiscreteValue v in CR.ParameterFields[0].DefaultValues)
                Category_cmb.Items.Add(v.Value);

        }


        private void GenerateReport_btn_Click(object sender, EventArgs e)
        {
            CR.SetParameterValue(0, Category_cmb.Text);
            CR.SetParameterValue(1, StartDate_txt.Text);
            CR.SetParameterValue(2, EndDate_txt.Text);

            crystalReportViewer1.ReportSource = CR;
        }
```

Or Convert.ToDateTime (textBox1.Text)

Crystal Reports with parameters(cont'd)

Crystal Reports with parameters(cont'd)

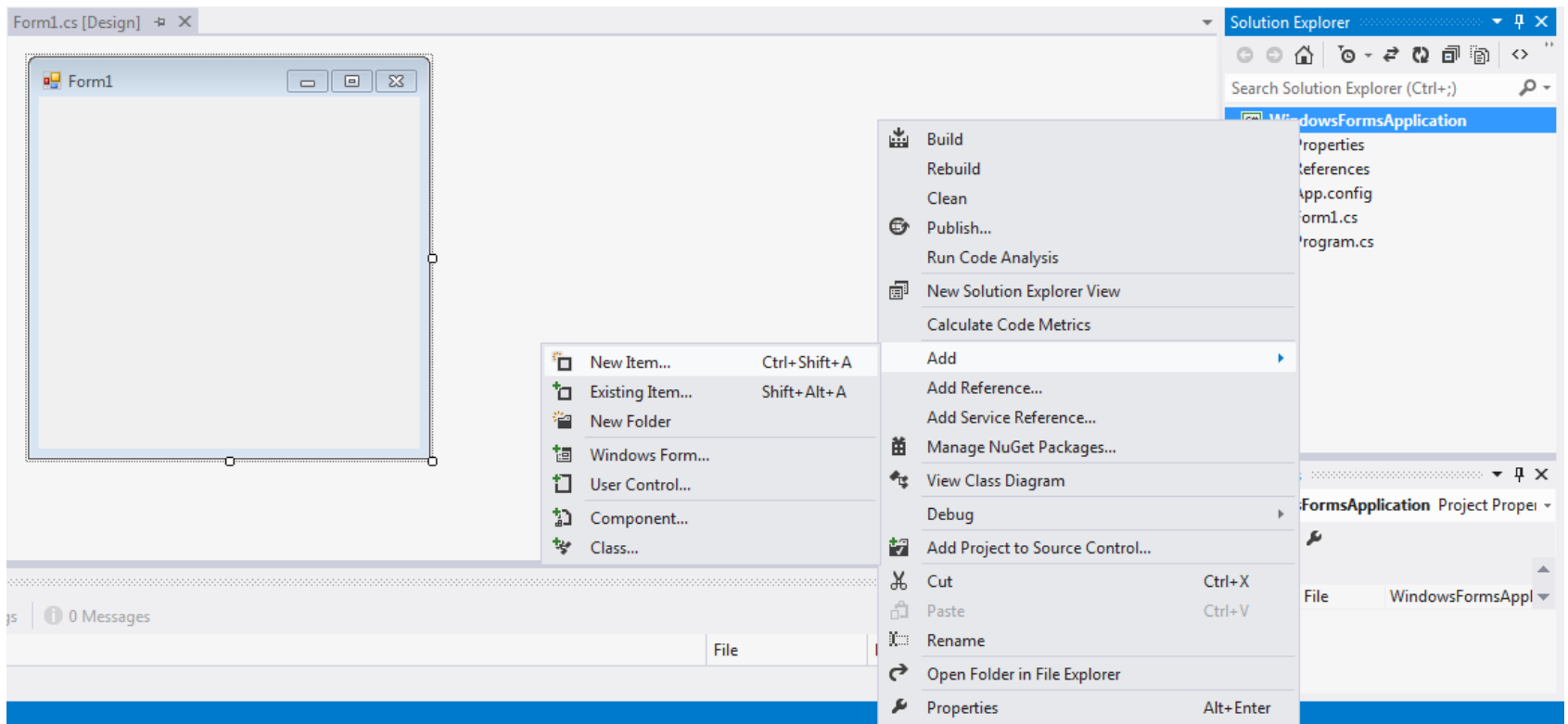# Adding Formula to Crystal Reports
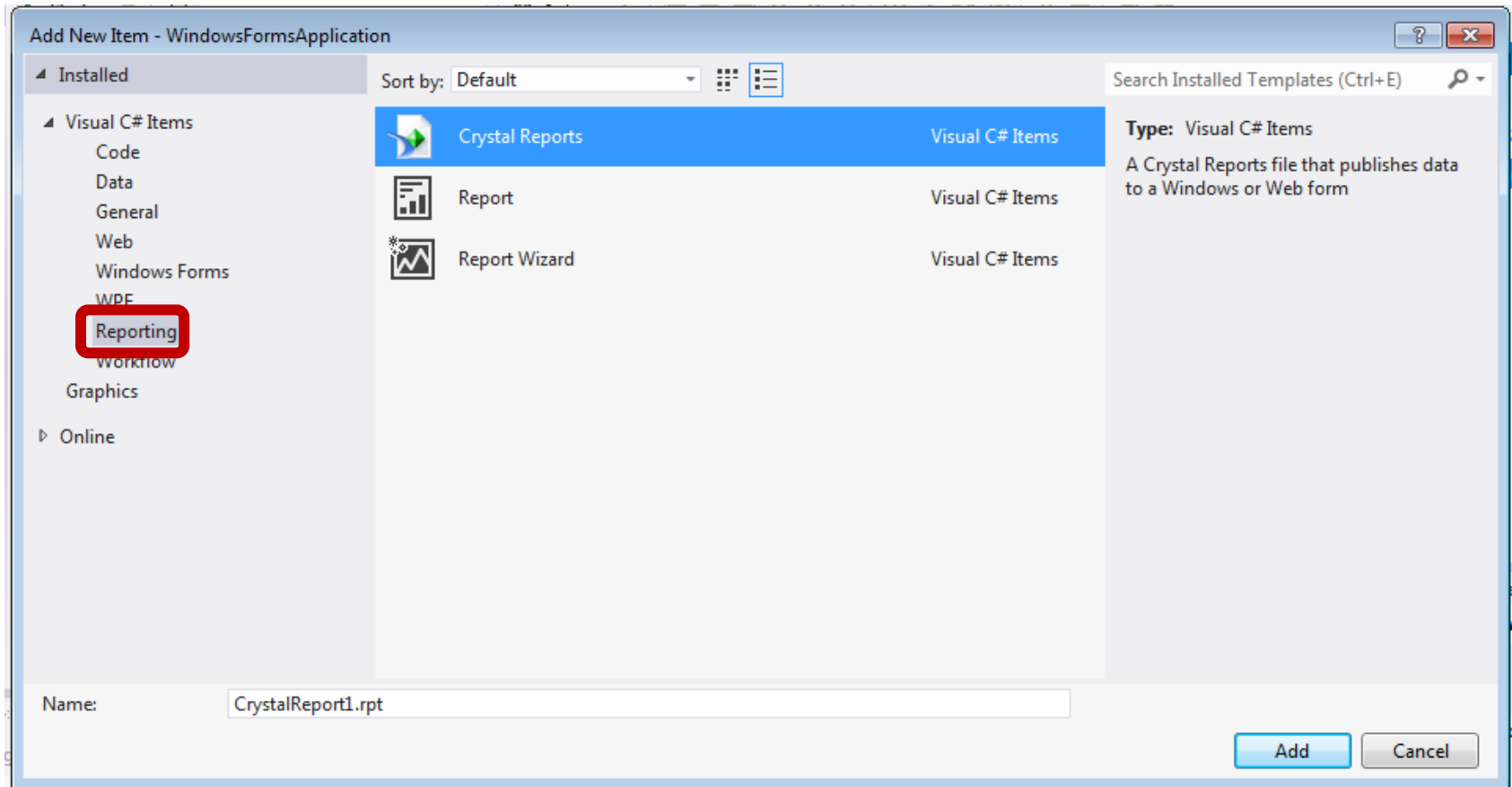
Create C# project(cont'd)
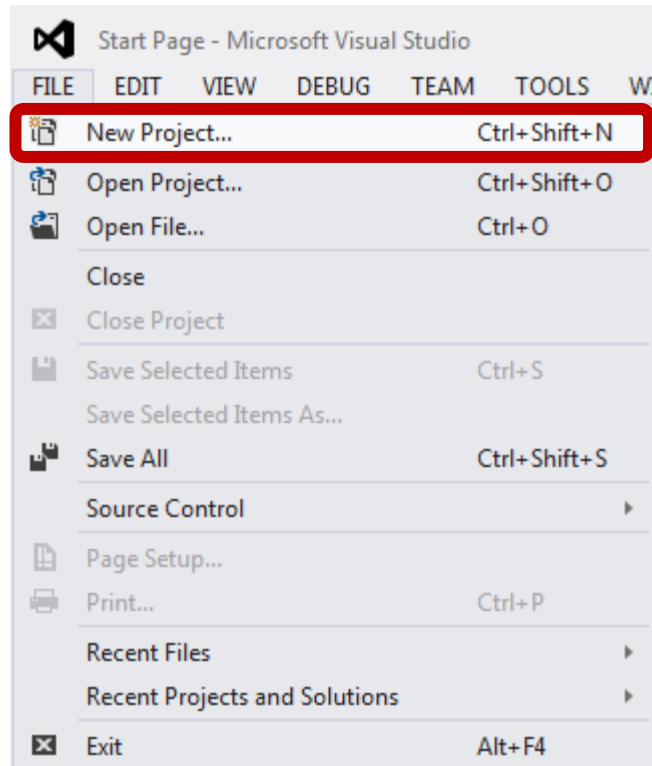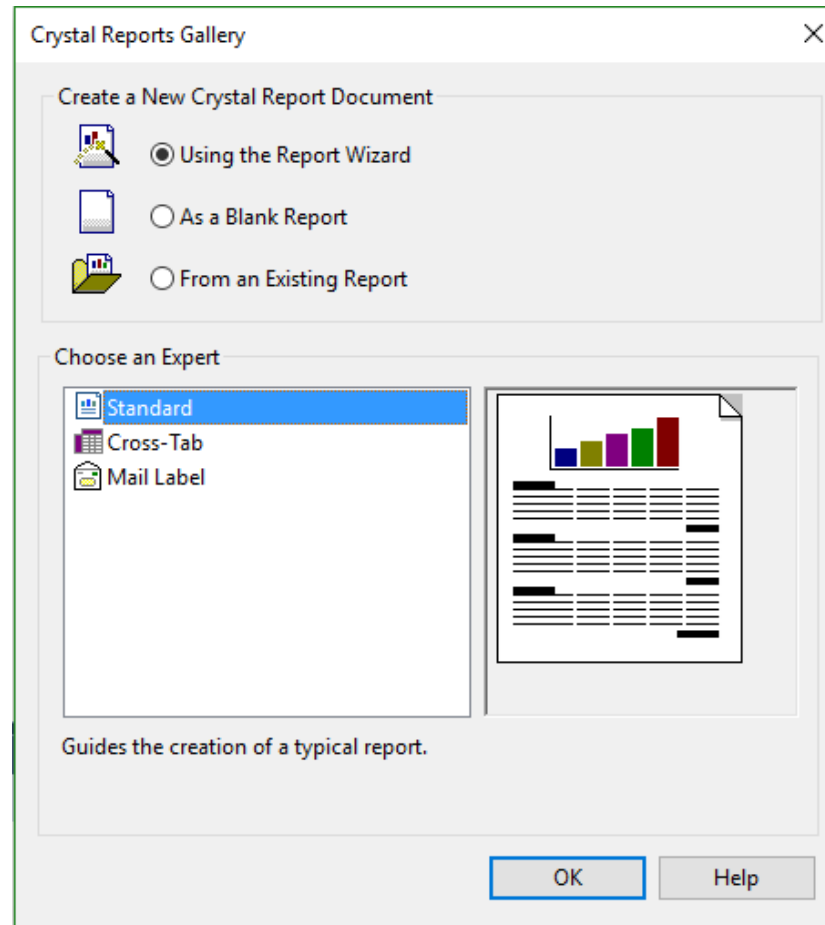
Create C# project(cont'd)
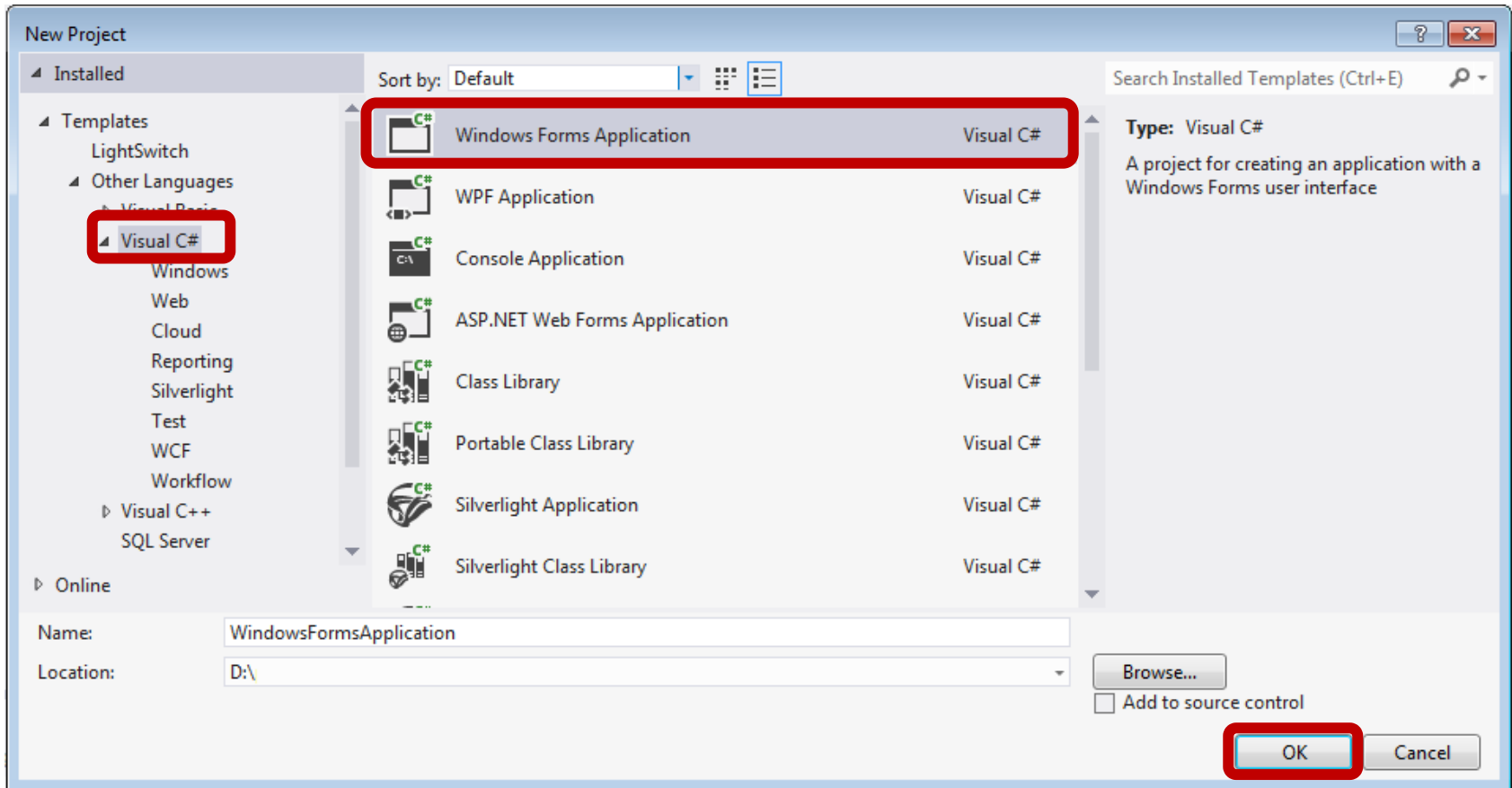
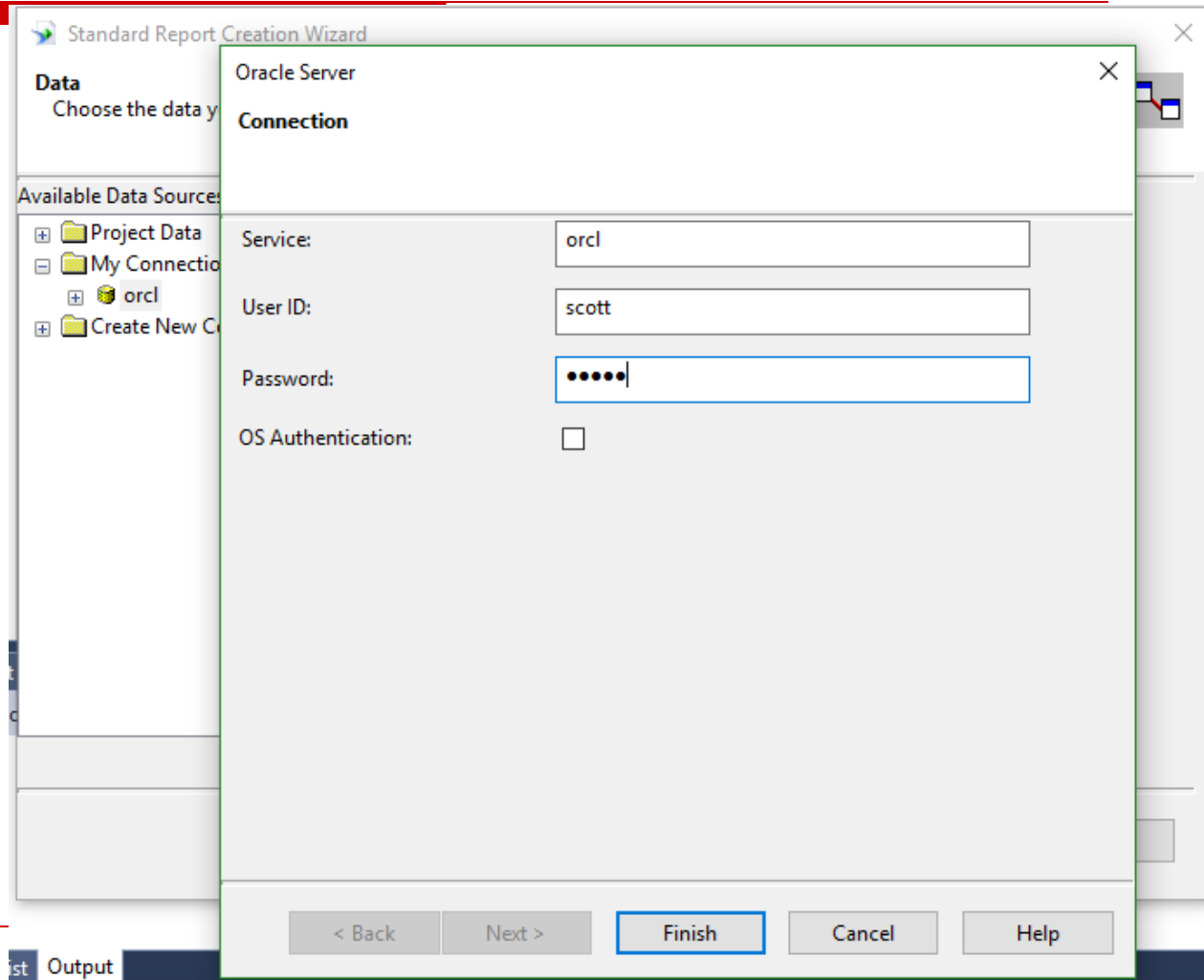# Create C# project(cont'd)

Create C# project(cont'd)

Add new Crystal Report(cont'd)

Add new Crystal Report(cont'd)

1. Select orcl Database

2. Enter username scott

   and
   Password tiger

Add new Crystal Report(cont'd)
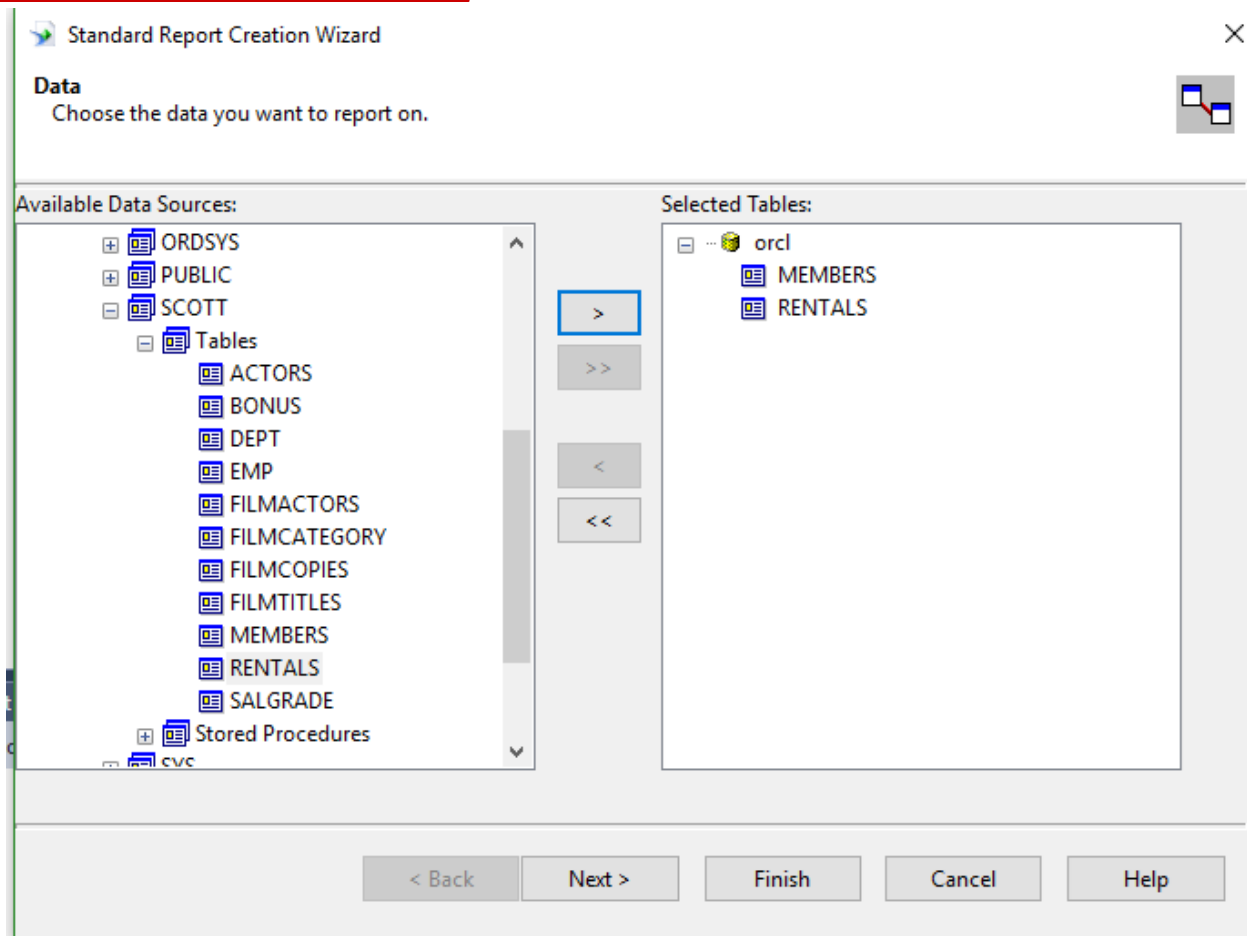
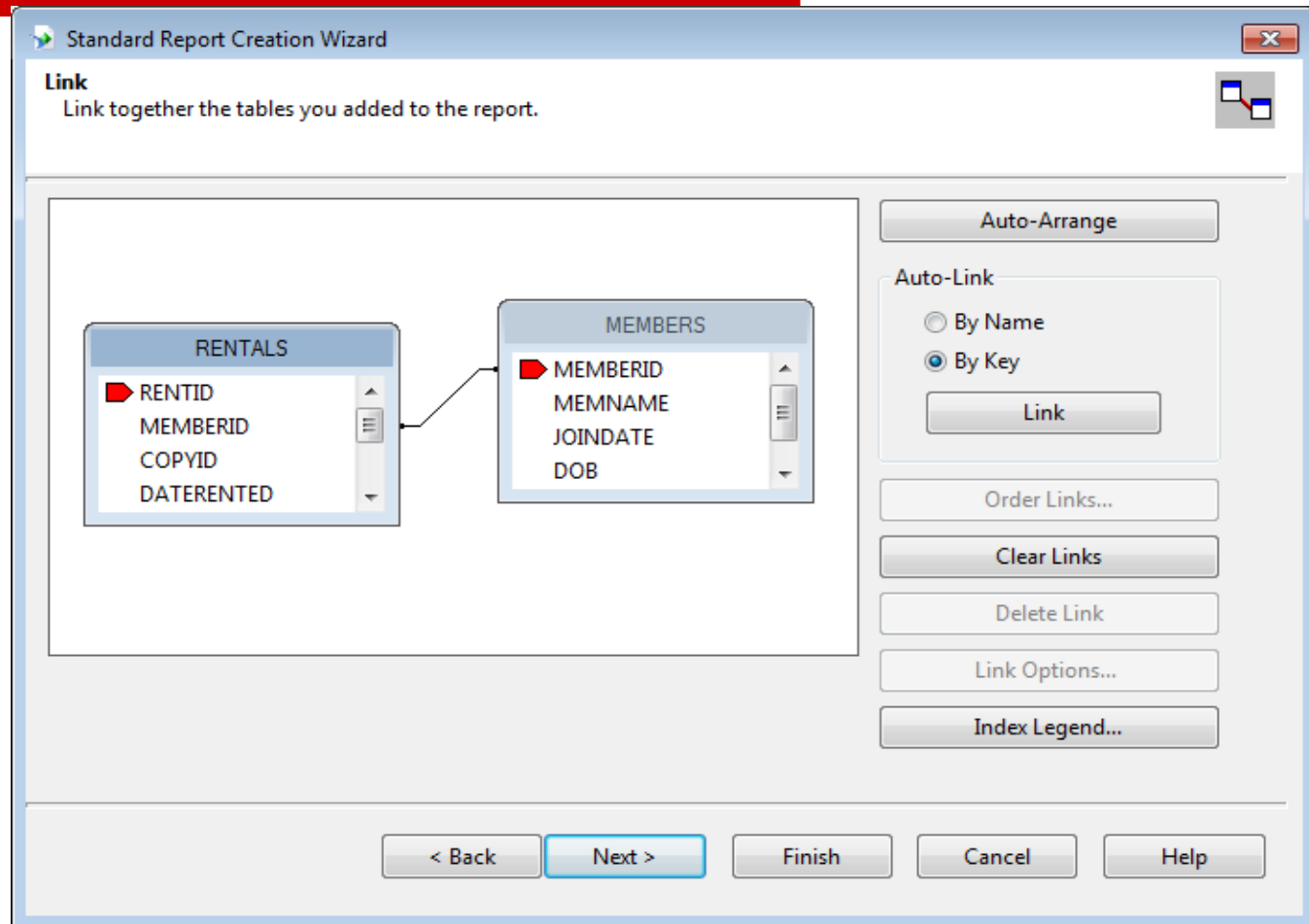# Add new Crystal Report(cont'd)

Add new Crystal Report(cont'd)

Select from scott schema tables
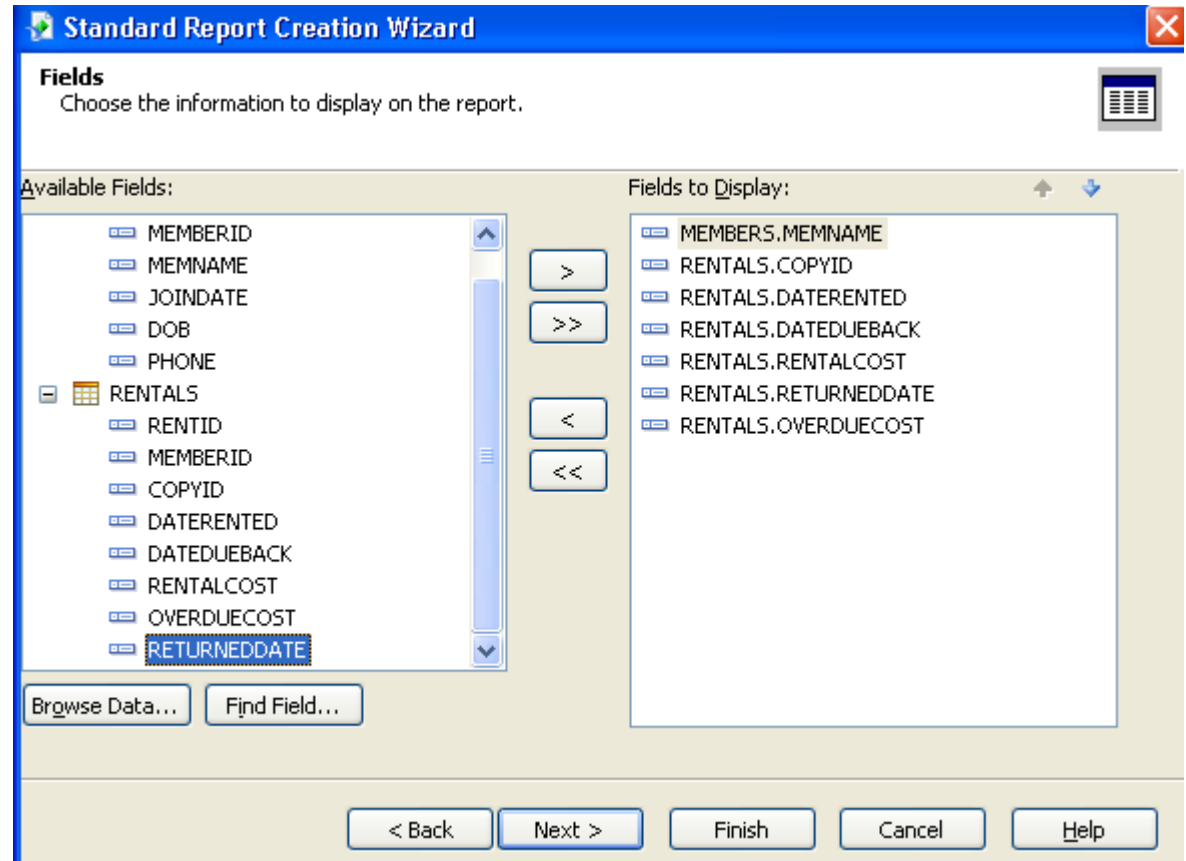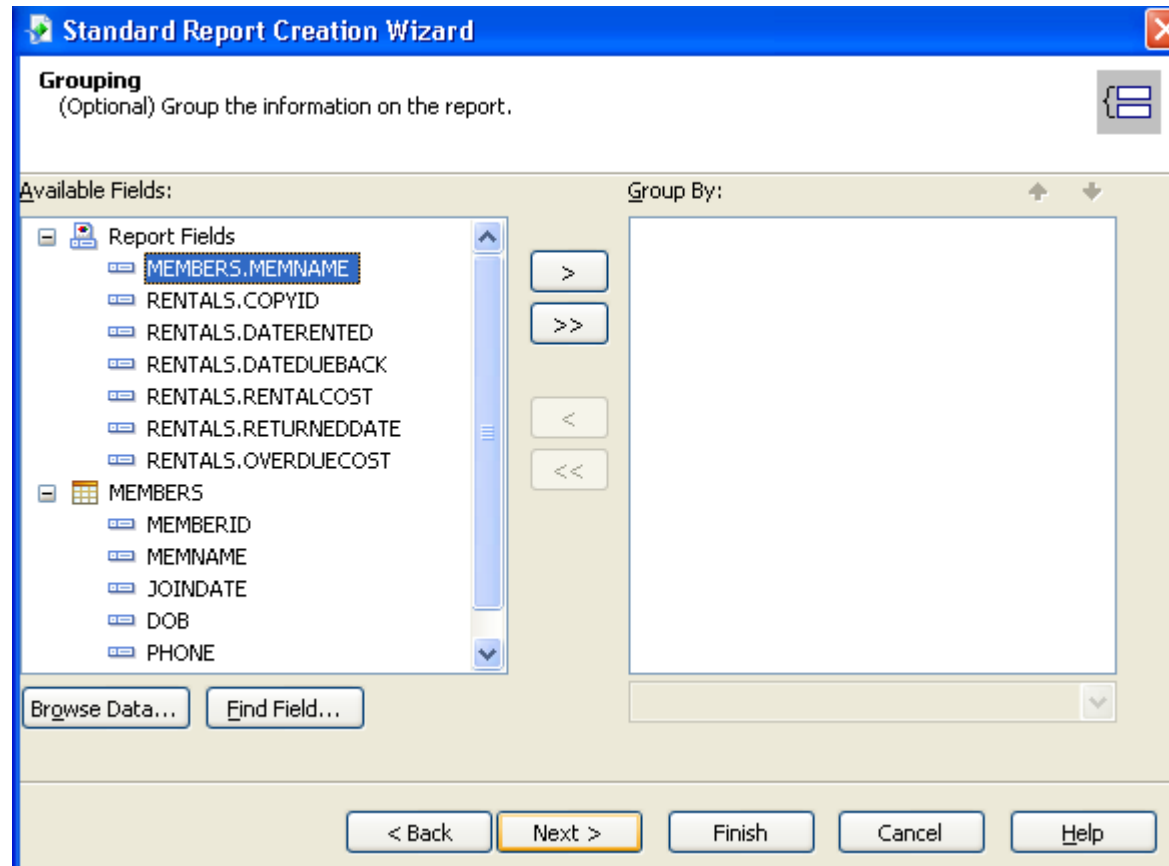1. Members
2. Rentals

Add new Crystal Report(cont'd)
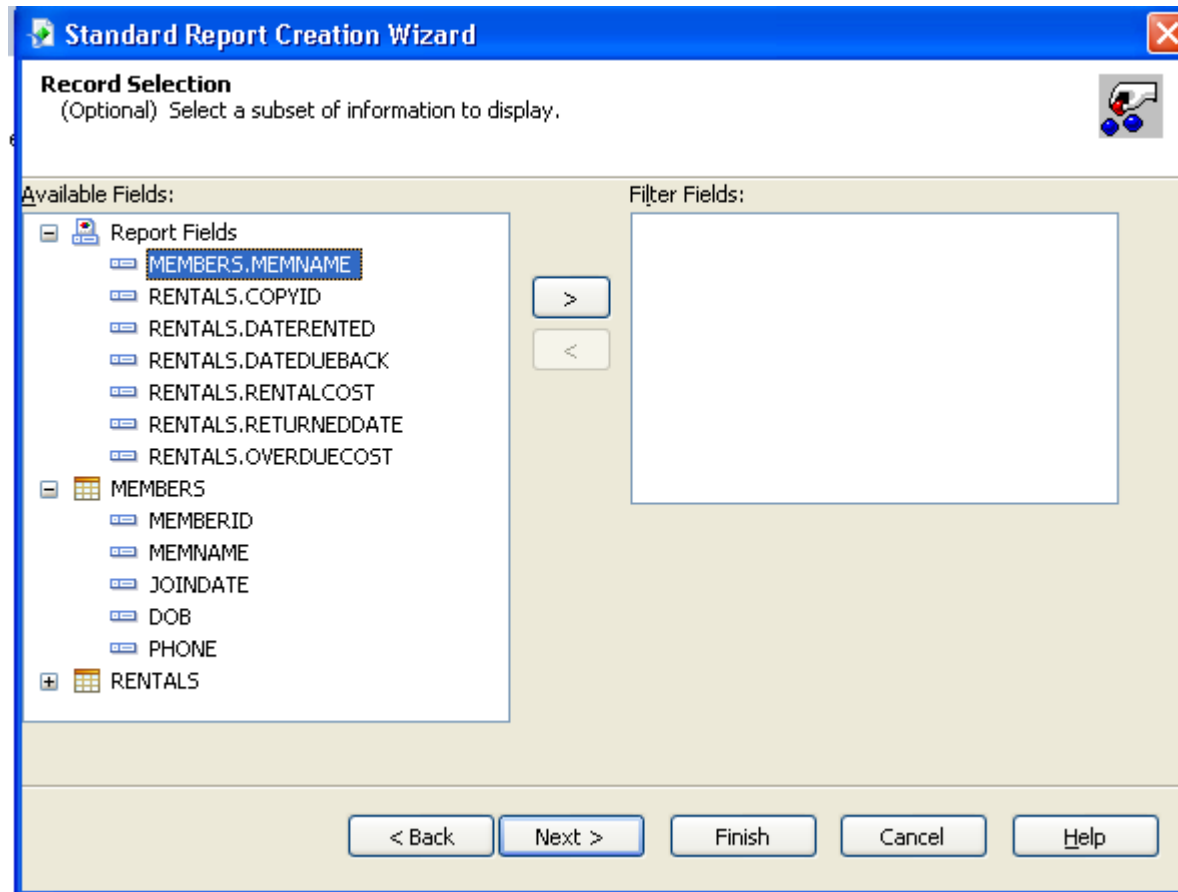
Add new Crystal Report(cont'd)

☐ Choose fields to be shown in the crystal report

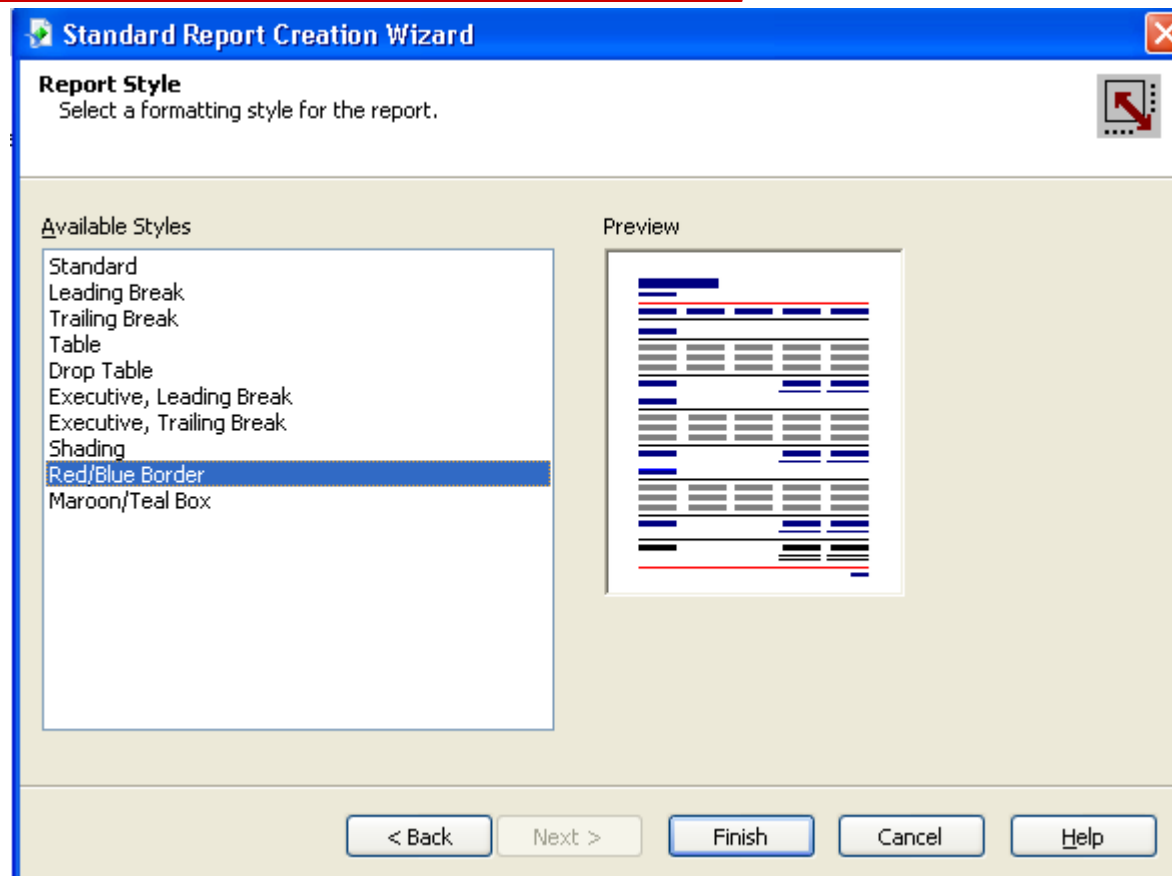# Add new Crystal Report(cont'd)

Add new Crystal Report(cont'd)

Add new Crystal Report(cont'd)

☑ Save data in the report

| | | | | | | 1 | / 1 | | | 100% | ⌄ | | | SA |

4/16/2017

MEMNA	COPY	DATEREN	DATEDUEB	RENTALCO	RETURNEDD	OVERDUEC
fady	6.00	3/2/2017 12:00:00AM	3/5/2017 12:00:00AM	10.00		10.00
Smith	6.00	3/5/2017 12:00:00AM	3/8/2017 12:00:00AM	10.00		20.00
Smith	6.00	3/6/2017 12:00:00AM	3/9/2017 12:00:00AM	10.00		10.00
fady	6.00	3/2/2017 12:00:00AM	3/5/2017 12:00:00AM	10.00		5.00
Robert	32.00	2/28/2017 12:00:00A	3/3/2017 12:00:00AM	55.00		10.00
fady	1.00	3/1/2017 12:00:00AM	3/4/2017 12:00:00AM	100.00		15.00
fady	11.00	3/3/2017 12:00:00AM	3/6/2017 12:00:00AM	50.00		15.00

🖳 Main Report   🖃 Main Report Preview
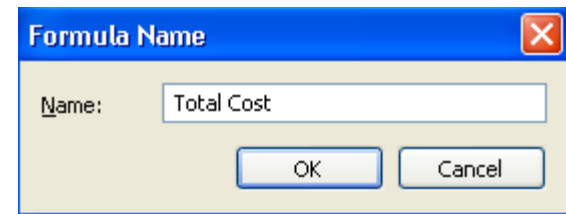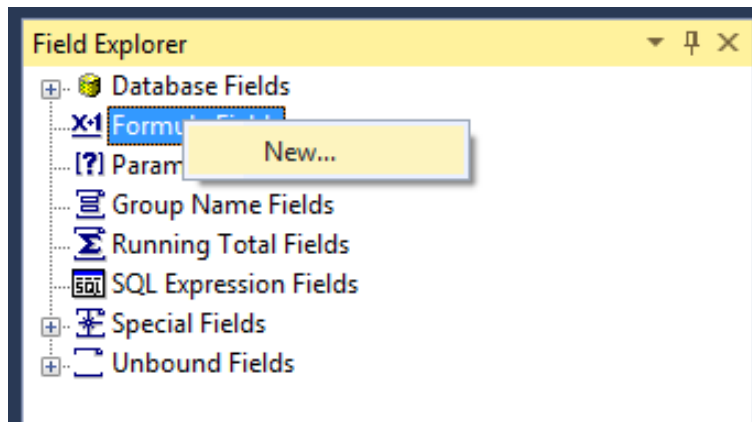
Add new formula in the report

- The formula field in a Crystal report is a functionality provided to enhance computation of values dynamically during the display/printing of records in a report of an application.

- In the next example we will create a formula to calculate the Total Rental Cost for each Rental in the System.
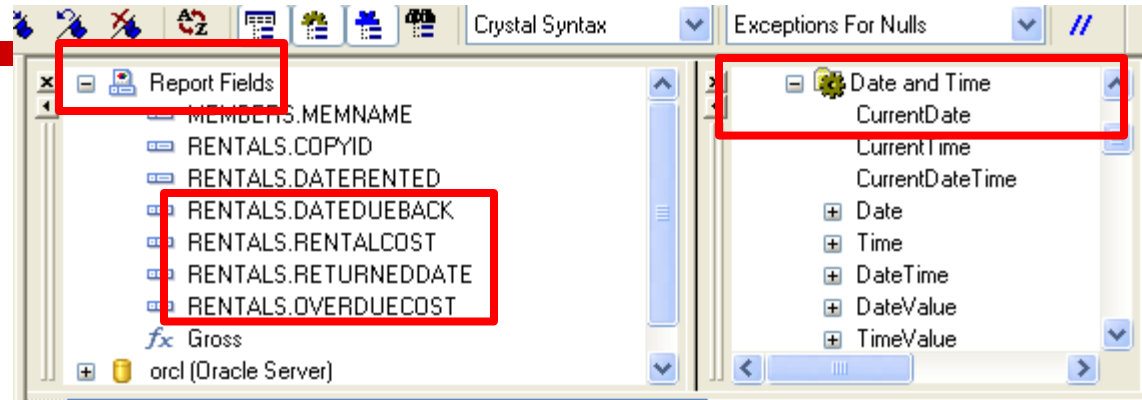
Add new formula in the report(cont'd)
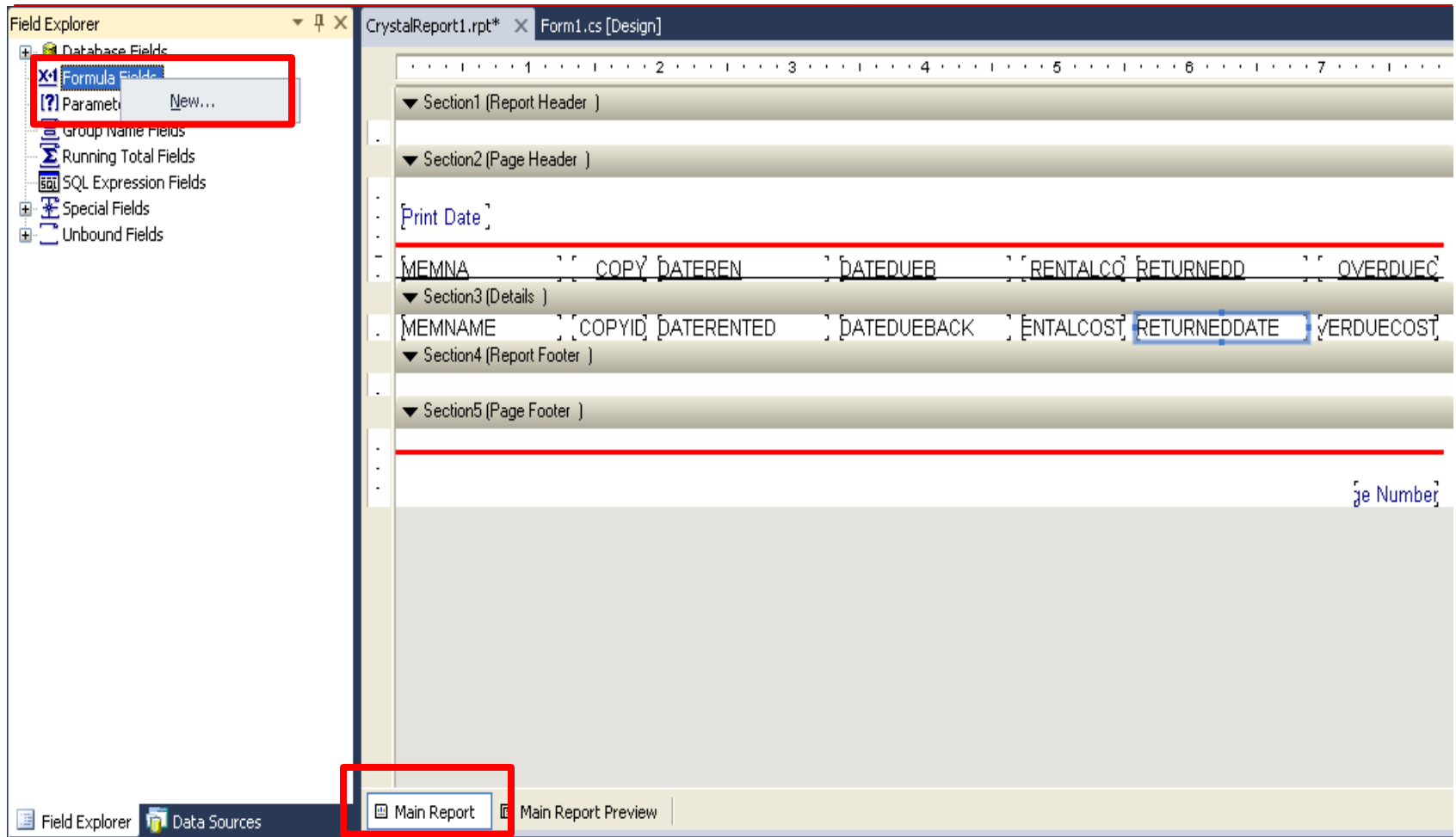
Add new formula in the report(cont'd)

☐ Add a new formula by right clicking the Formula Fields and choose new.

☐ Write the name of your Formula:
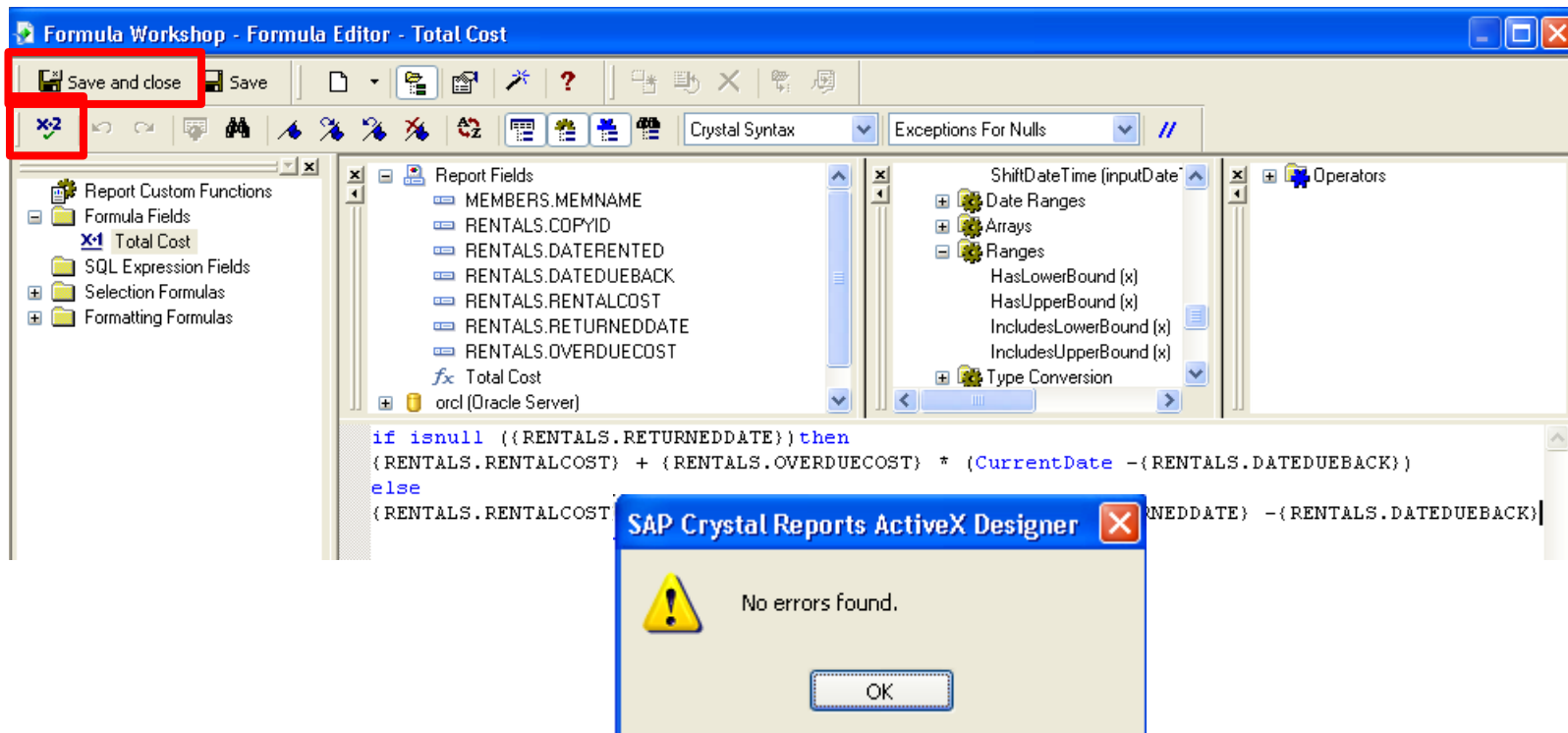Total cost

Add new formula in the report(cont'd)

if isnull ({RENTALS.RETURNEDDATE}) then

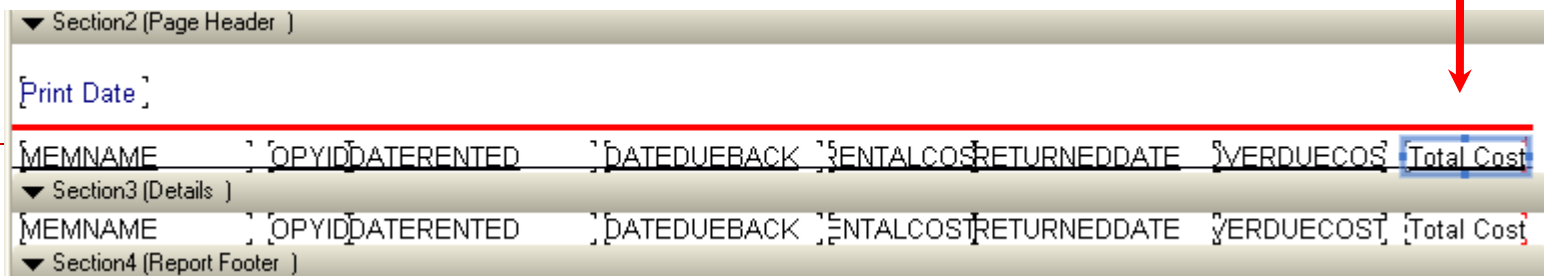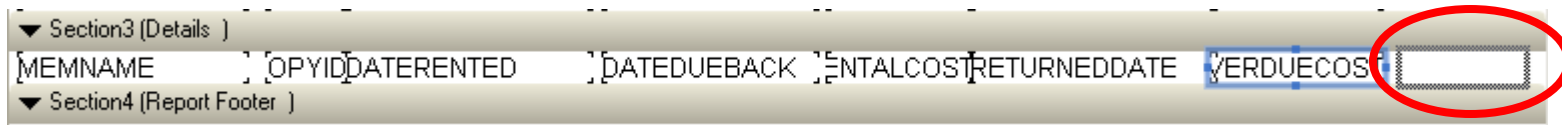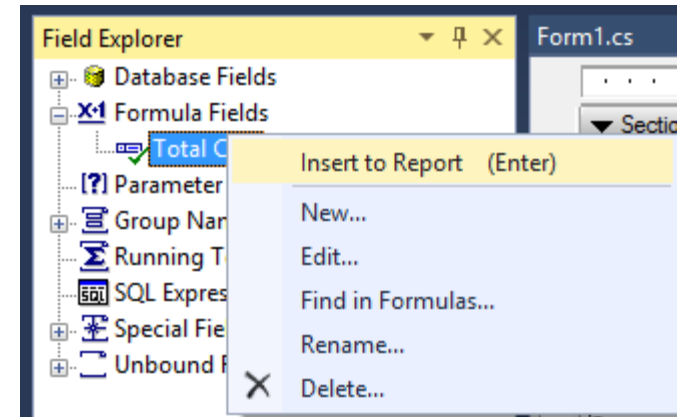{RENTALS.RENTALCOST} + {RENTALS.OVERDUECOST} * (CurrentDate - {RENTALS.DATEDUEBACK})

else
{RENTALS.RENTALCOST} + {RENTALS.OVERDUECOST} * ({RENTALS.RETURNEDDATE} - {RENTALS.DATEDUEBACK})

Add new formula in the report(cont'd)

Add new formula in the report(cont'd)

☐ To insert the formula in your report, right click on the Formula Field and choose insert, then drag the mouse to Section3 Details.

Add new formula in the report(cont'd)

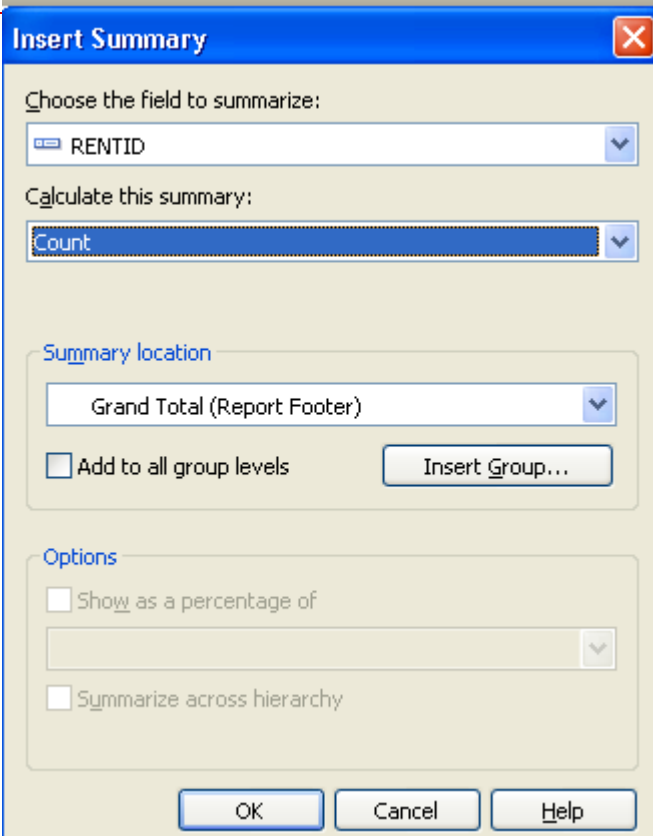# Adding Summary Field to the Report Footer

Add Summary Field for the Whole Report

☐ In the Crystal Reports designer view window, right click on the Report Footer, just below the Total field and select Insert -> Summary
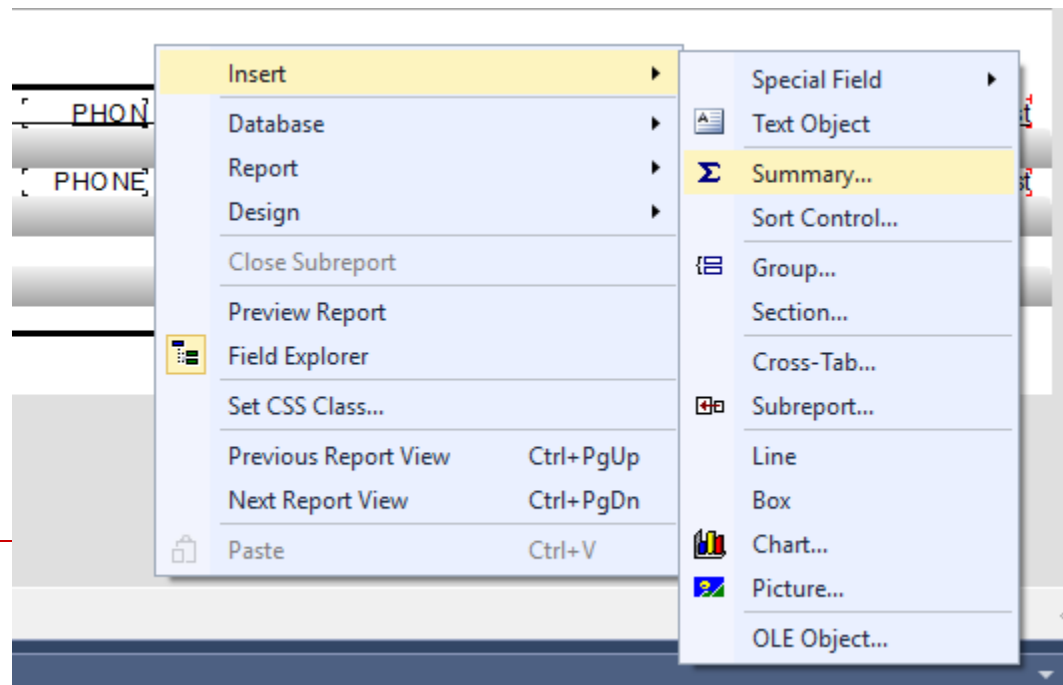
Add Summary Field for the Whole Report(cont'd)

☐ Then you will get a screen , select the **RentID** from the combobox and select **Count** from next Combobox , and summary location **Grand Total (Report Footer)**
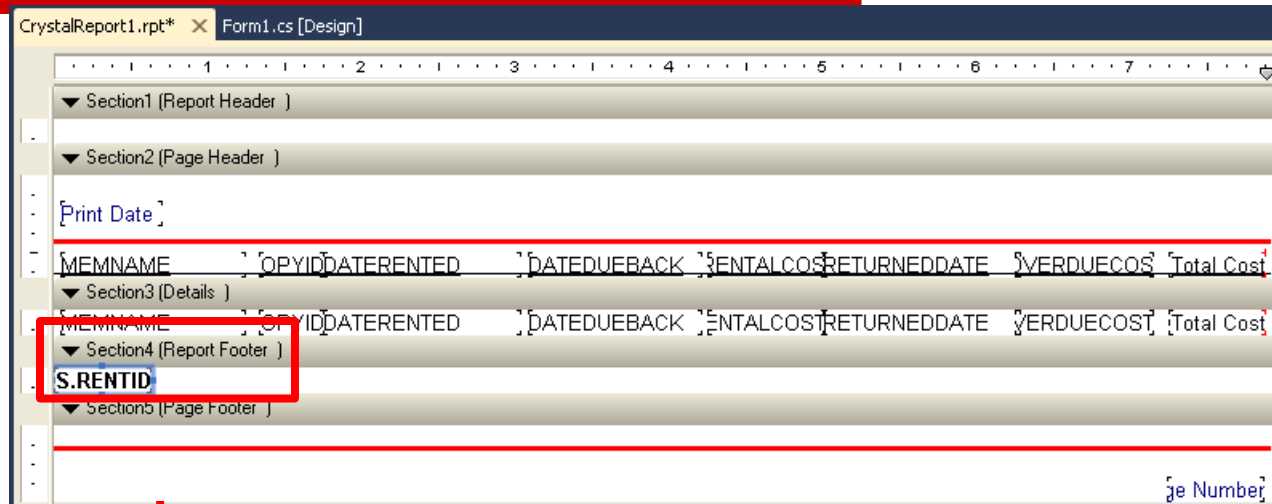
☐ Click Ok button

Add Summary Field for the Whole Report(cont'd)

Add Summary Field for the Whole Report(cont'd)

Thank You