
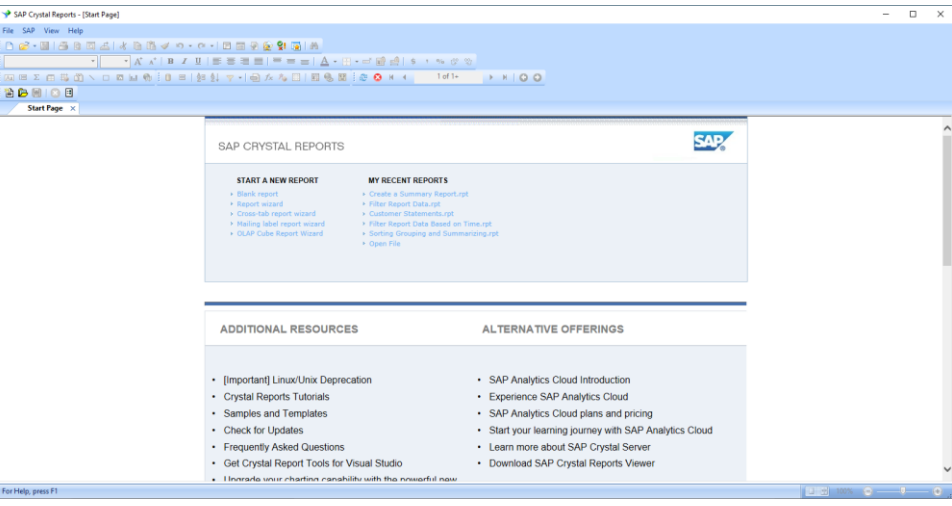

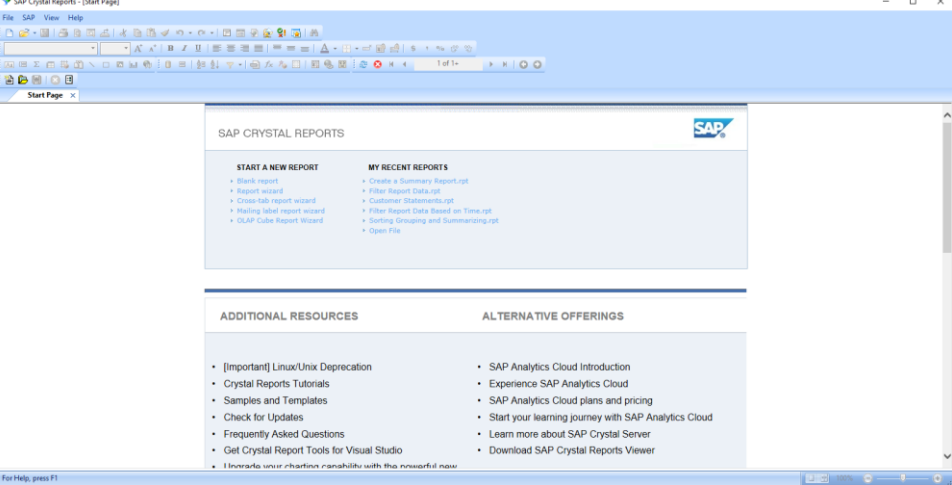
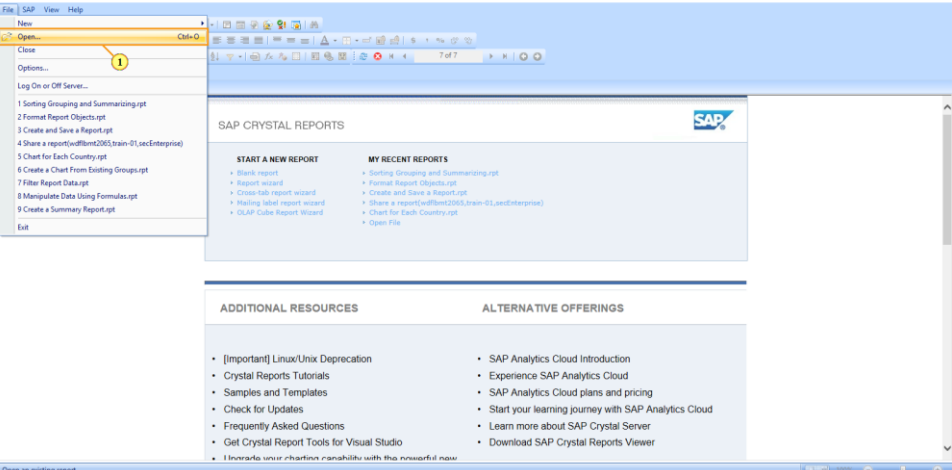
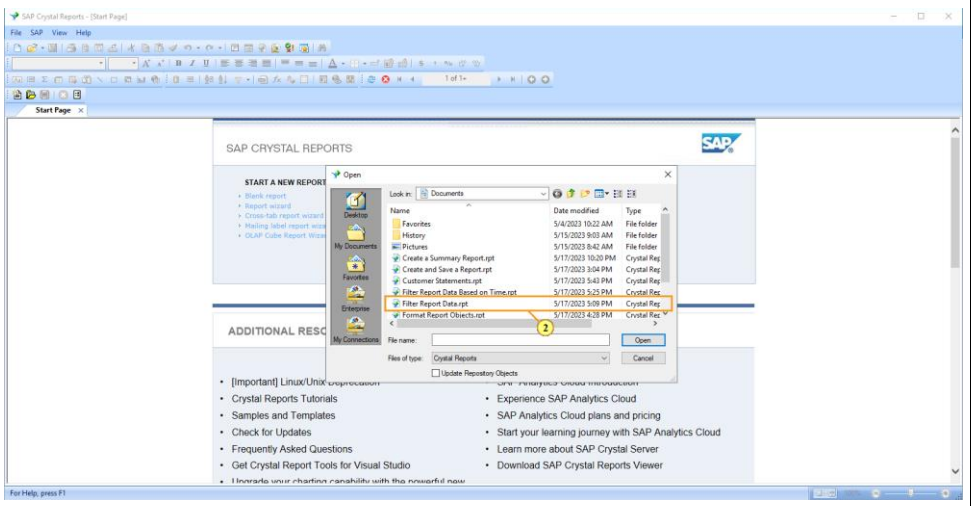
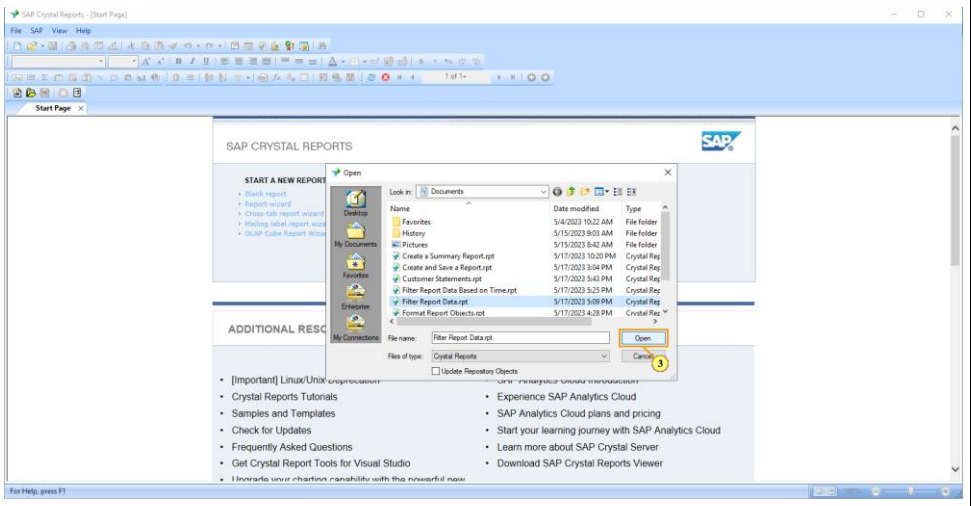

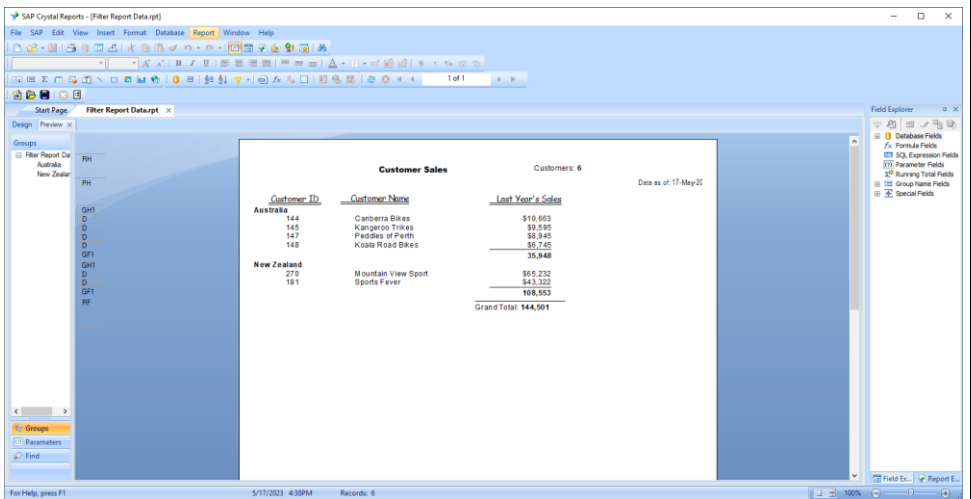
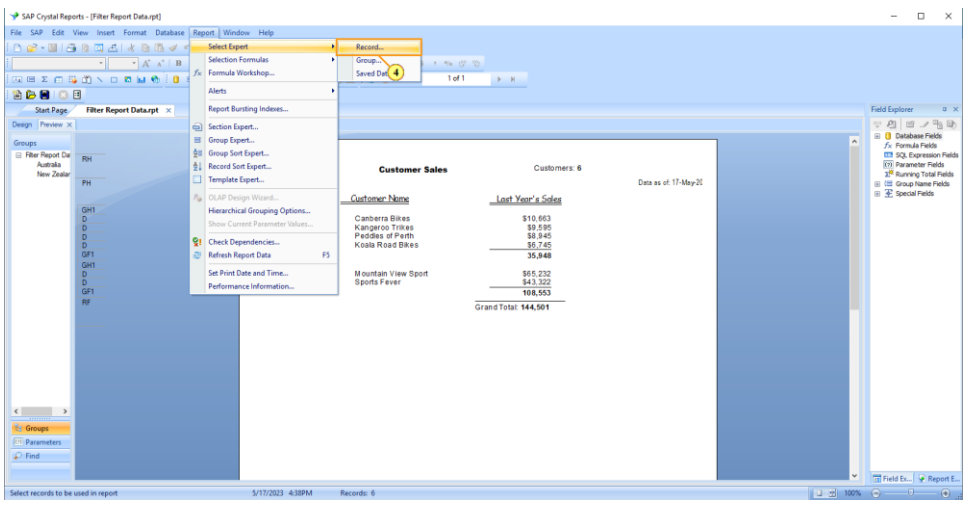
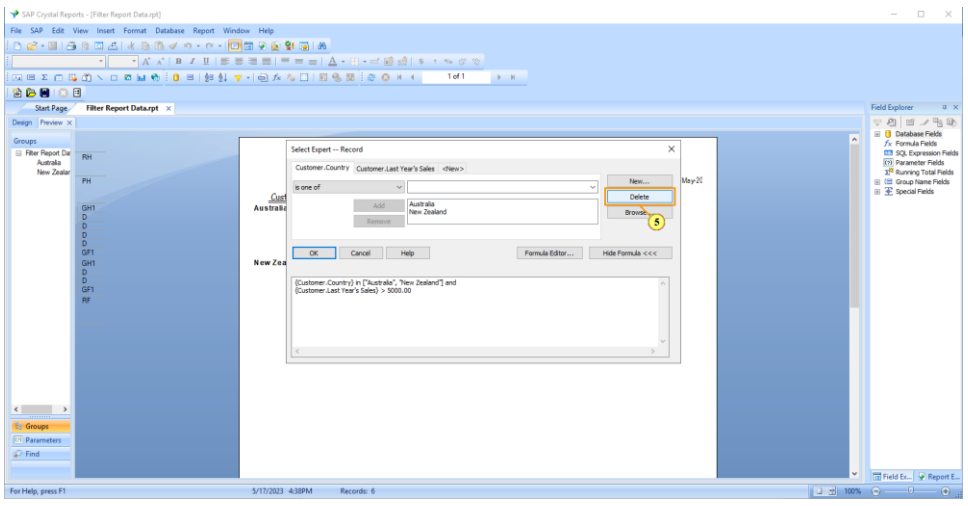
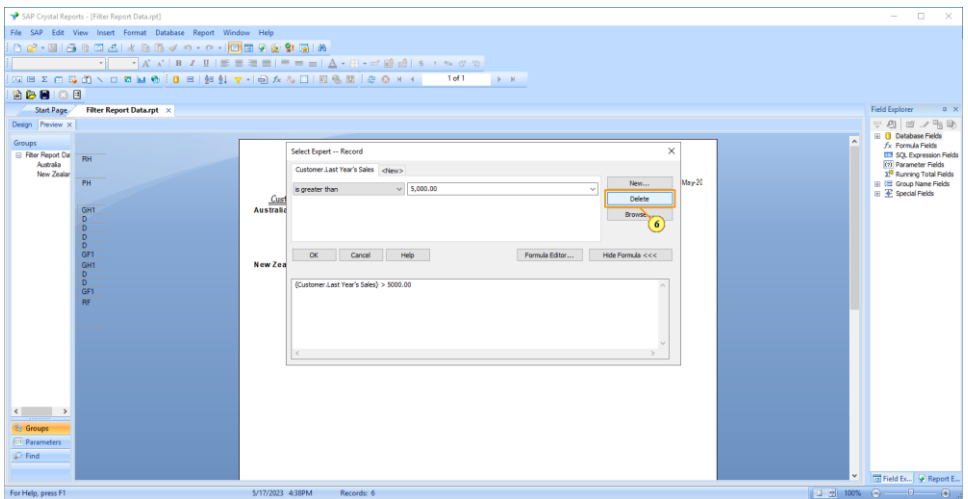
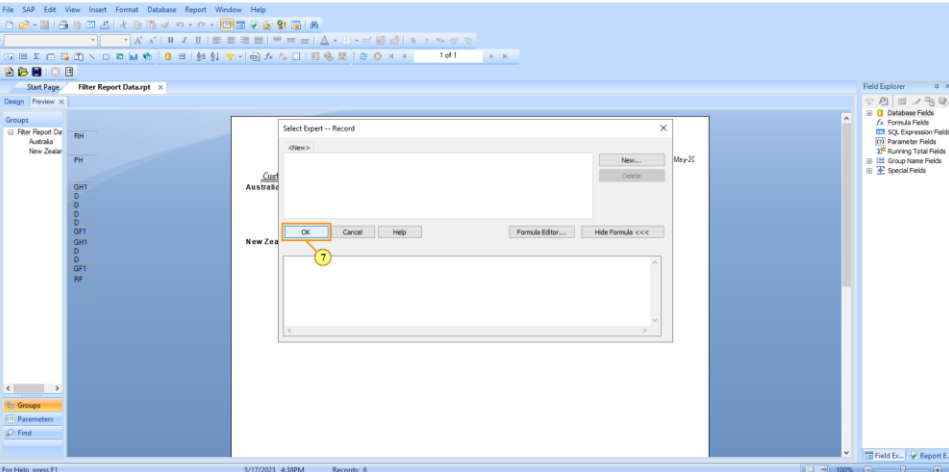
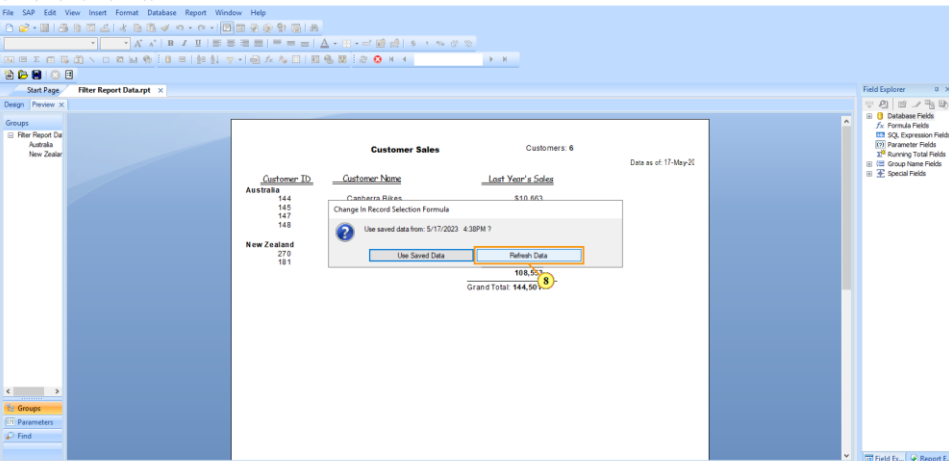
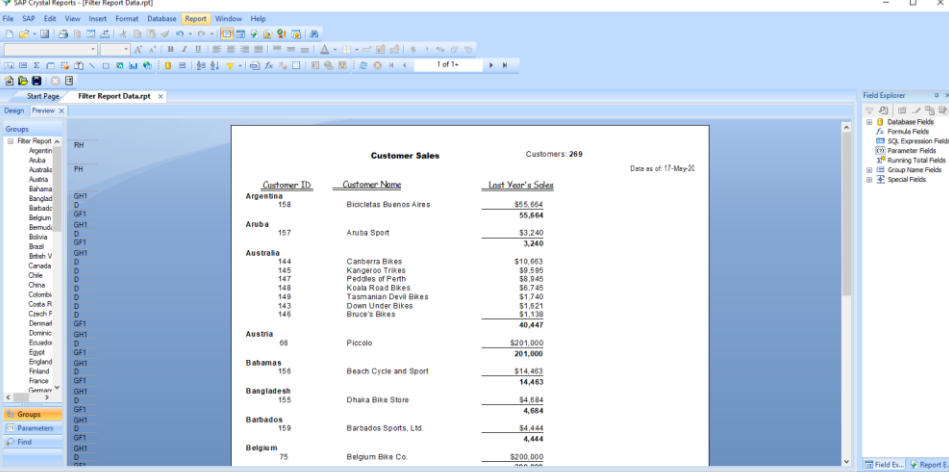


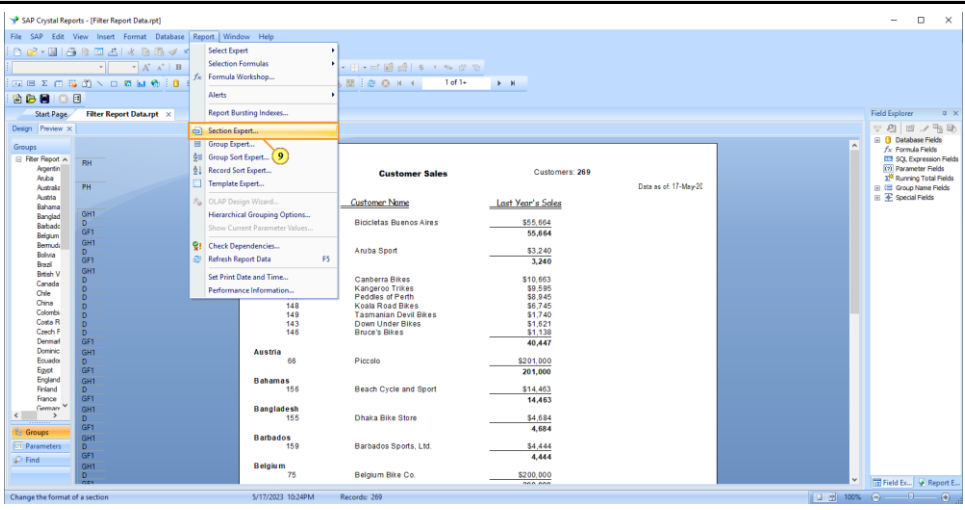
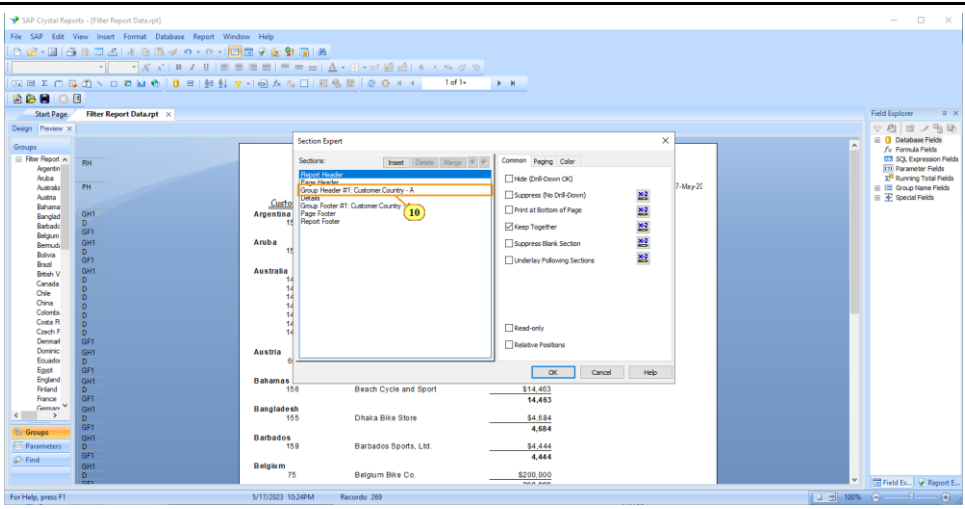
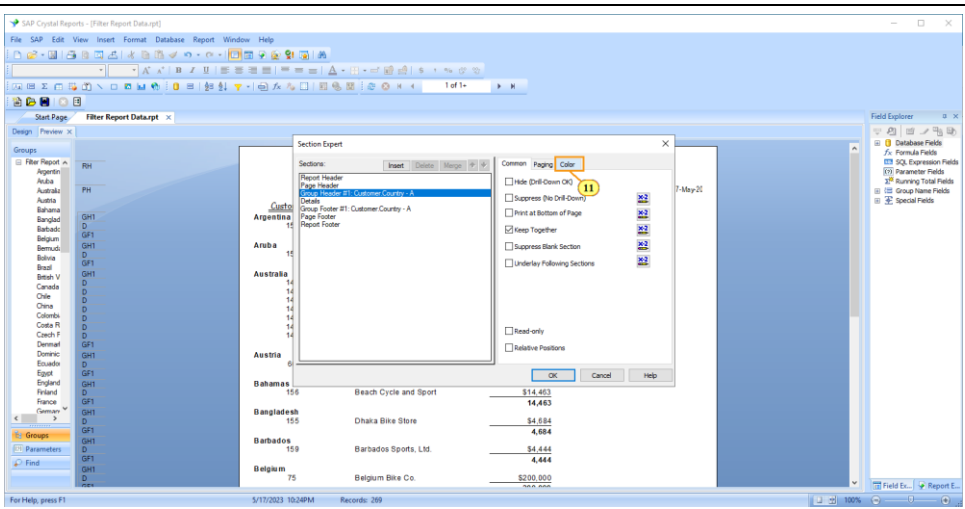
Manipulate Data Using Formulas

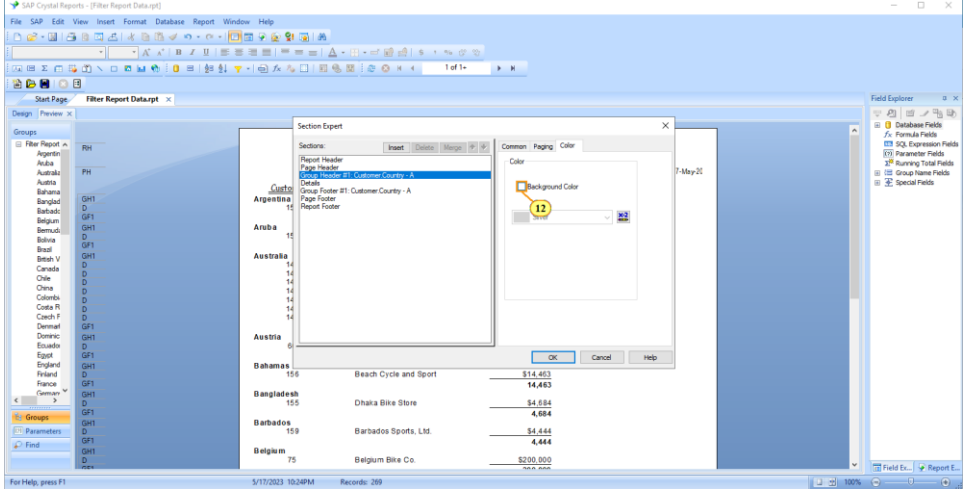
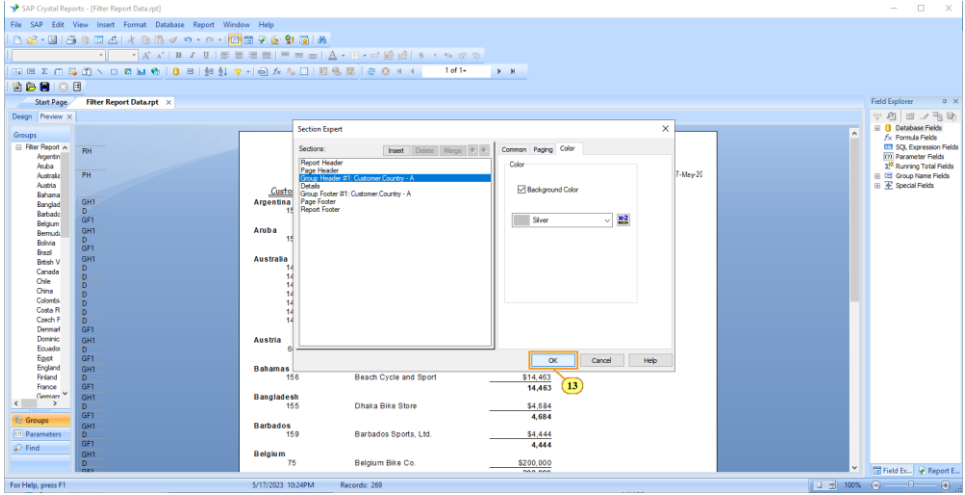

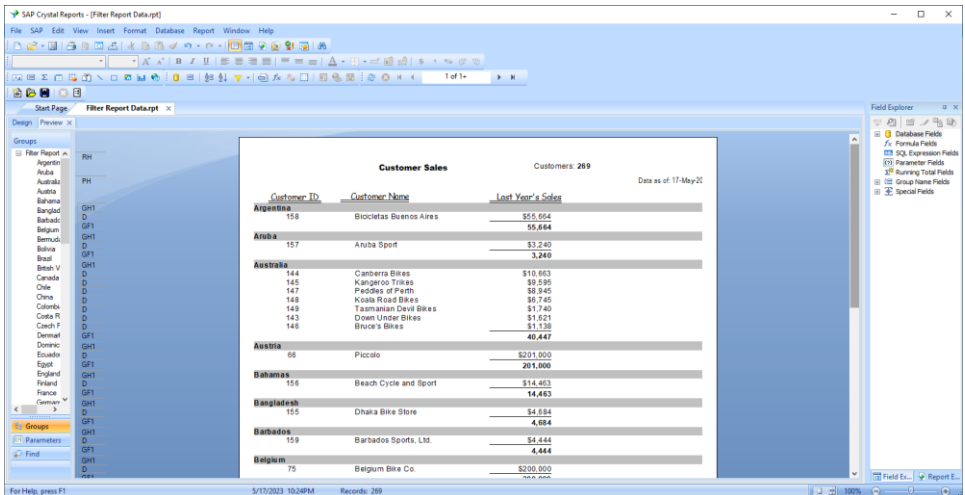
Explanation	Screenshot
<p> Enhance the report using formulas to create a customer contact field and calculate their rebate amount.</p> <p>To learn more about how to manipulate data using formulas, follow this interactive tutorial.</p>	
<p> In the following steps, you will open the filter report data report.</p>	
<p>1. Choose <i>File > Open</i>.</p>	

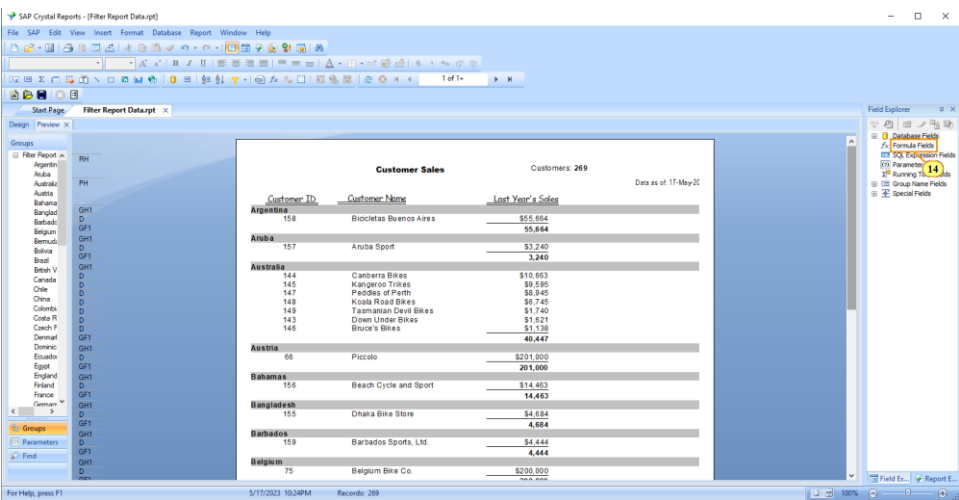
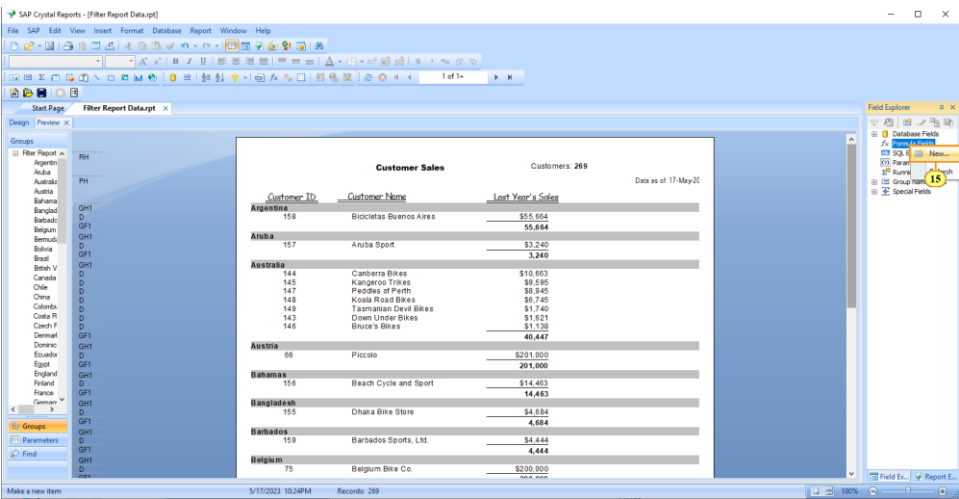
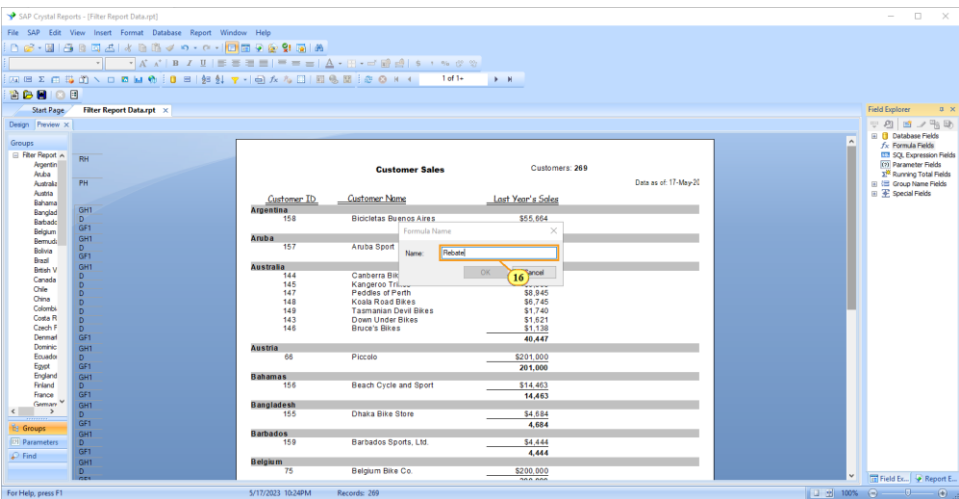
Explanation	Screenshot
<p>2. Choose <i>Filter Report Data.rpt</i>.</p>	
<p>3. Choose <i>Open</i>.</p>	
<p> In the following steps, you will remove the filter so that all the data is displayed.</p>	

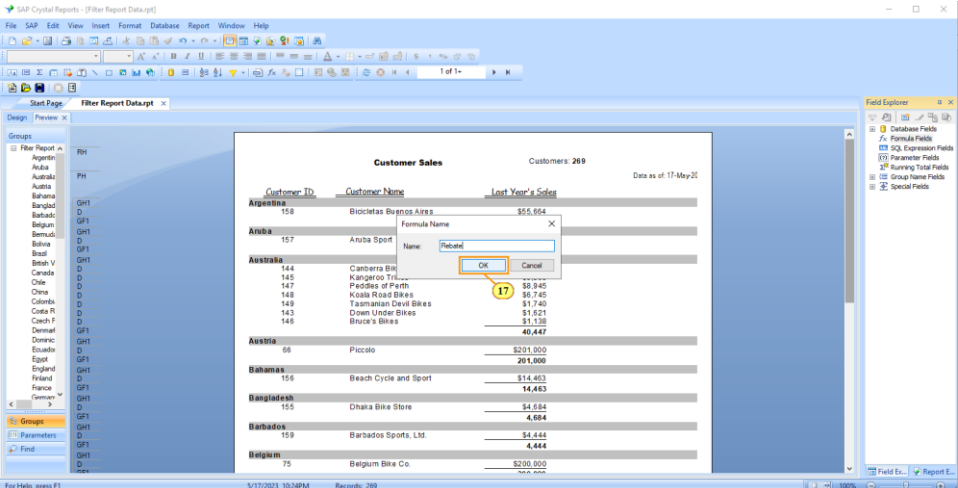
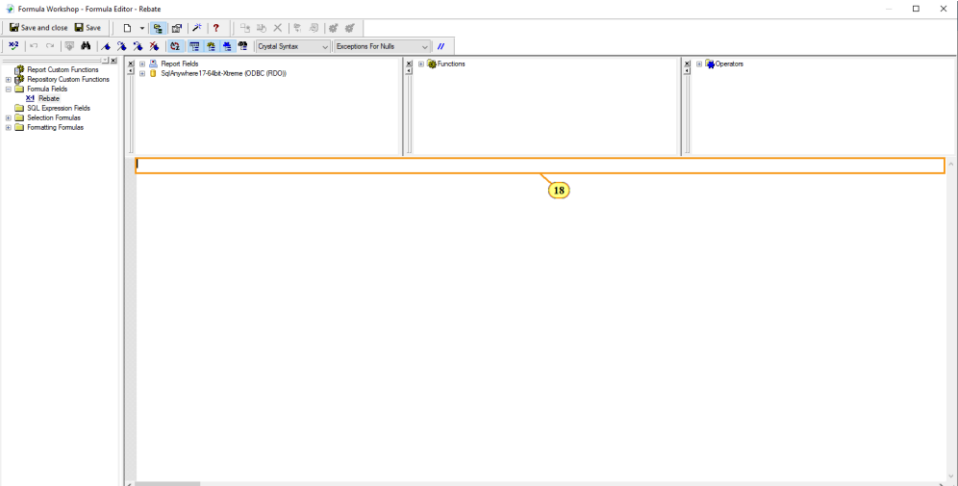
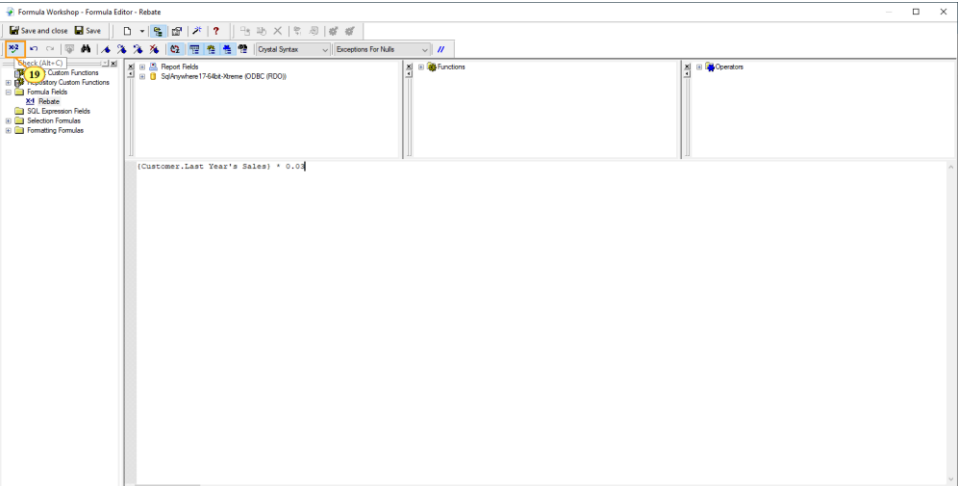
Explanation	Screenshot
<p>4. Choose <i>Report > Select Expert > Record</i>.</p>	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Report' menu is open, and 'Select Expert' is chosen. In the 'Select Expert' sub-menu, 'Record' is highlighted. The background shows a report titled 'Customer Sales' with a table of customer data and a 'Grand Total' of 144,501. The status bar indicates 'Records: 6'.</p>
<p>5. Choose <i>Delete</i>.</p>	 <p>The screenshot shows the 'Select Expert - Record' dialog box. The 'Customer.COUNTRY' field is selected, and the 'Delete' button is highlighted. The dialog box also shows a list of countries: Australia and New Zealand. The status bar indicates 'Records: 6'.</p>
<p>6. Choose <i>Delete</i>.</p>	 <p>The screenshot shows the 'Select Expert - Record' dialog box. The 'Customer.Last Year's Sales' field is selected, and the 'Delete' button is highlighted. The dialog box also shows a list of countries: Australia and New Zealand. The status bar indicates 'Records: 6'.</p>

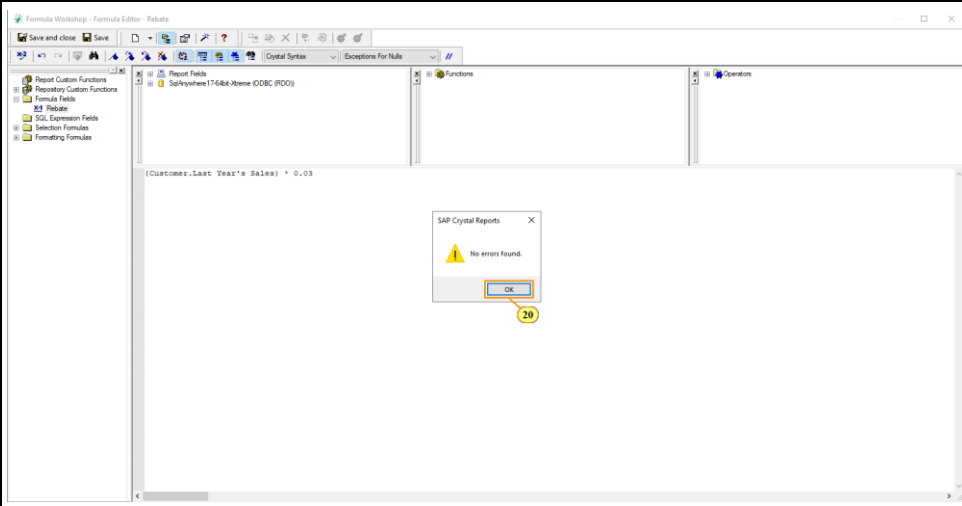
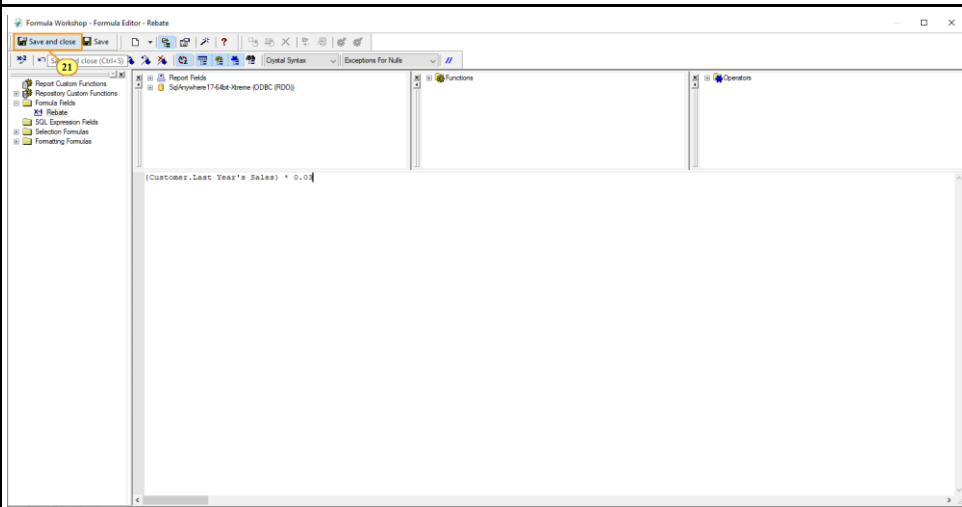

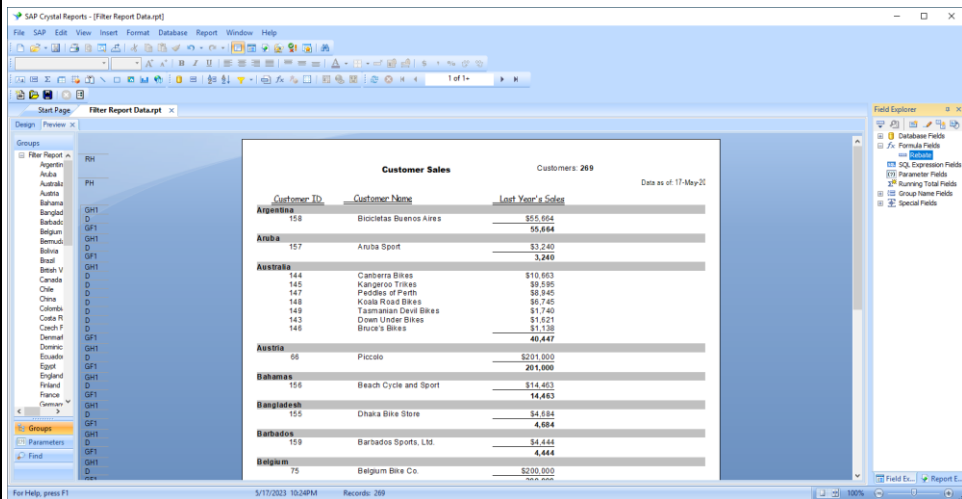
Explanation	Screenshot
<p>7. Choose <i>OK</i>.</p>	 <p>The screenshot shows the SAP Crystal Reports interface with the 'Filter Report Data.rpt' file open. A 'Select Expert - Record' dialog box is displayed in the center, with the 'OK' button highlighted by a yellow circle and the number 7. The dialog box has a 'New...' button and a 'Delete' button. The background shows a list of groups in the 'Field Explorer' pane, including 'Filter Report Data', 'Australia', and 'New Zealand'.</p>
<p>8. Choose <i>Refresh Data</i>.</p>	 <p>The screenshot shows the SAP Crystal Reports interface with the 'Customer Sales' report. The 'Refresh Data' button is highlighted by a yellow circle and the number 8. The report displays a table with columns for 'Customer ID', 'Customer Name', and 'Last Year's Sales'. The data is grouped by country, with 'Australia' and 'New Zealand' visible. The 'Grand Total' is shown as 144,500.</p>
<p>In the following steps, you will shade the background of the Country header.</p>	 <p>The screenshot shows the SAP Crystal Reports interface with the 'Customer Sales' report. The country header is shaded. The report displays a table with columns for 'Customer ID', 'Customer Name', and 'Last Year's Sales'. The data is grouped by country, with 'Argentina', 'Aruba', 'Australia', 'Austria', 'Bahamas', 'Bangladesh', 'Barbados', and 'Belgium' visible. The 'Grand Total' is shown as 200,000.</p>

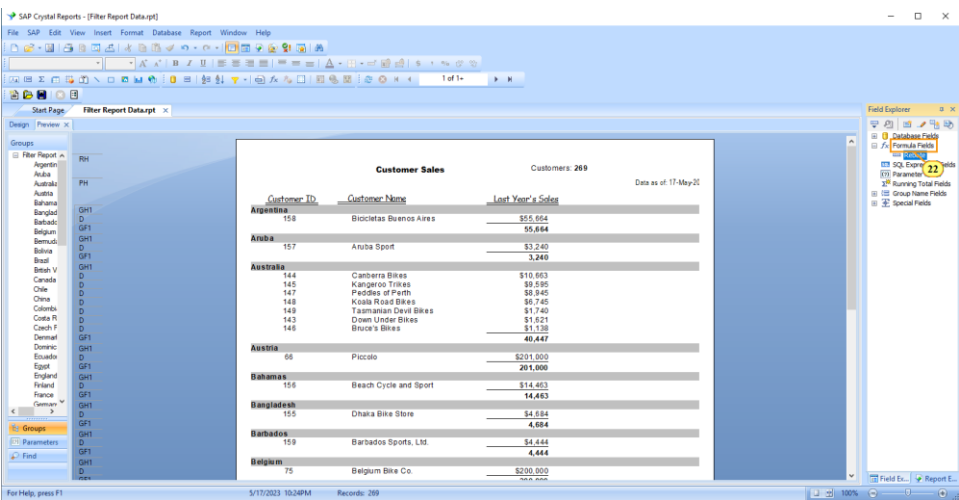
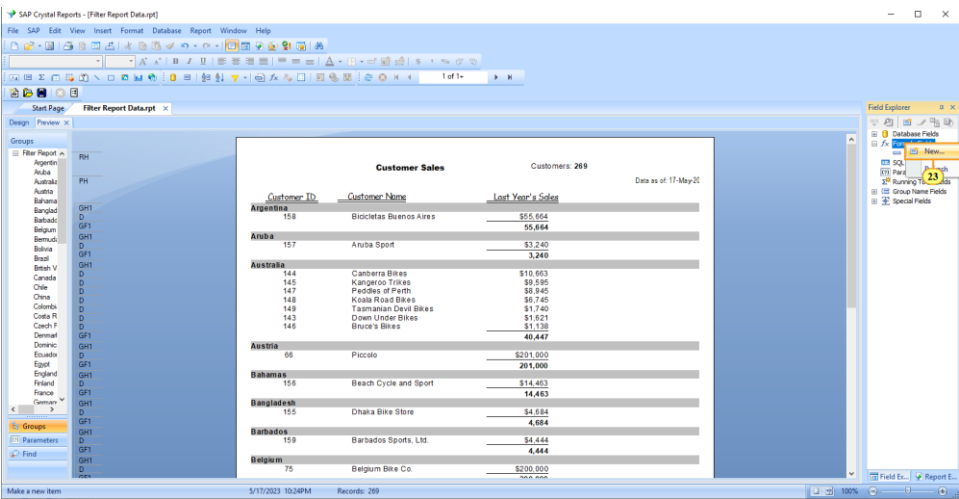
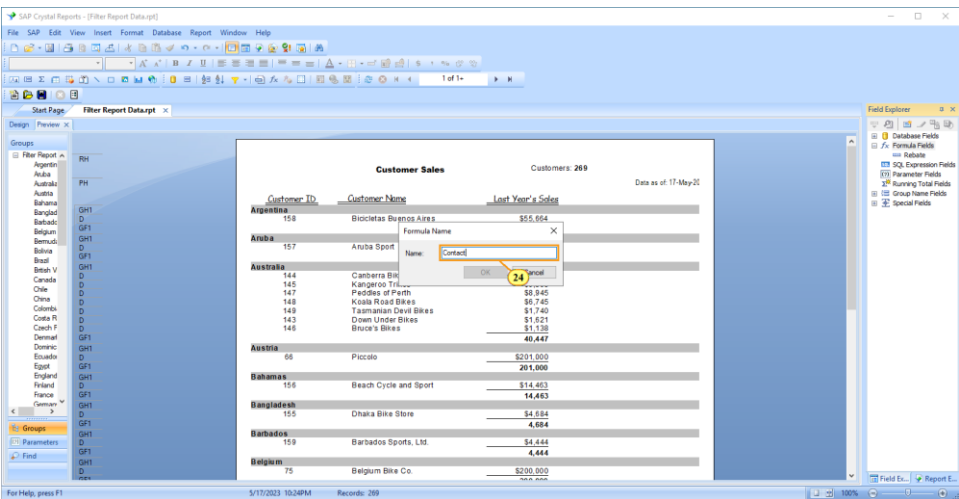
Explanation	Screenshot
<p>9. Select Report > Section Expert.</p>	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Report' menu is open, and the 'Section Expert' option is highlighted with a yellow circle. The background shows a preview of a report titled 'Customer Sales' with a table of data.</p>
<p>10. Choose Group Header #1: Customer.Country - A.</p>	 <p>The screenshot shows the 'Section Expert' dialog box. The 'Sections' tab is active, and 'Group Header #1: Customer.Country - A' is selected. A yellow circle highlights this selection. The background shows the same 'Customer Sales' report preview.</p>
<p>11. Choose Color.</p>	 <p>The screenshot shows the 'Section Expert' dialog box. The 'Color' tab is selected, and a yellow circle highlights the 'Color' tab. The background shows the same 'Customer Sales' report preview.</p>

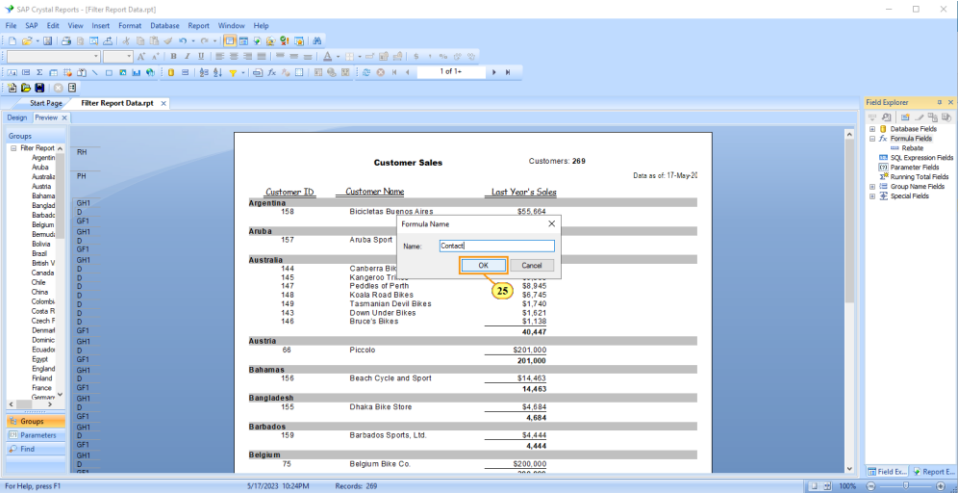

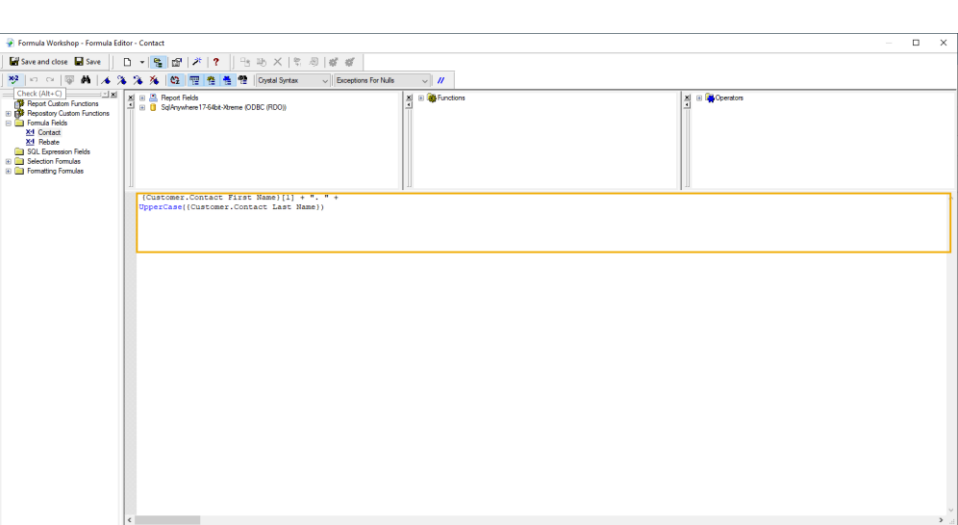
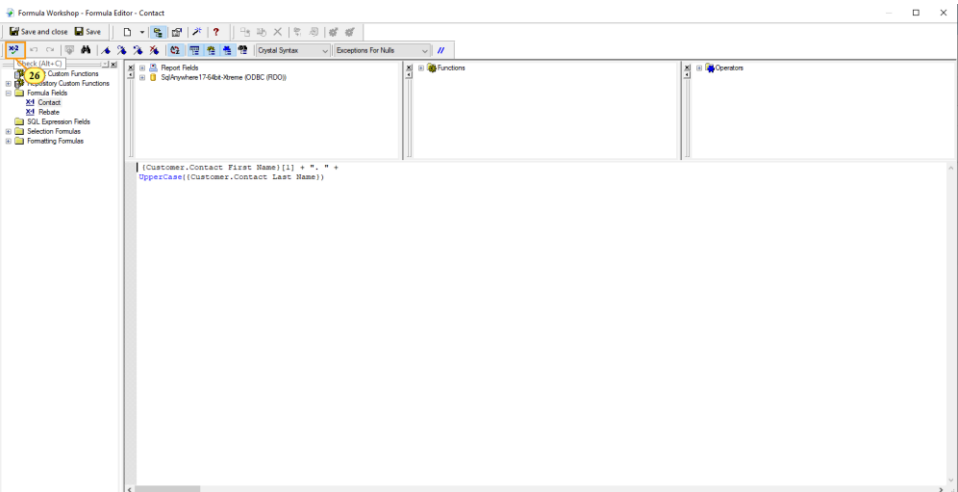
Explanation	Screenshot
<p>12. Enable <i>Background Color</i>.</p>	
<p>13. Choose OK.</p>	
<p> In the following steps, you will add a formula that calculates a Rebate.</p>	

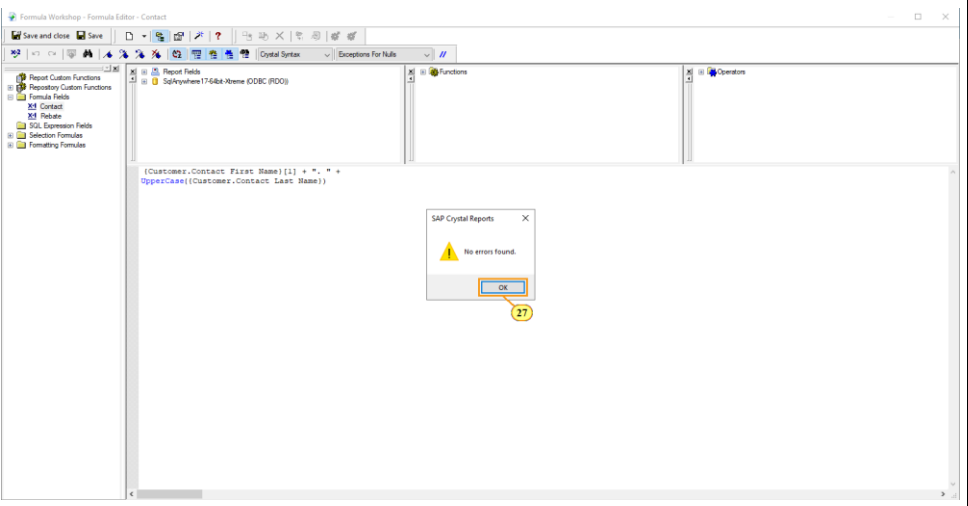
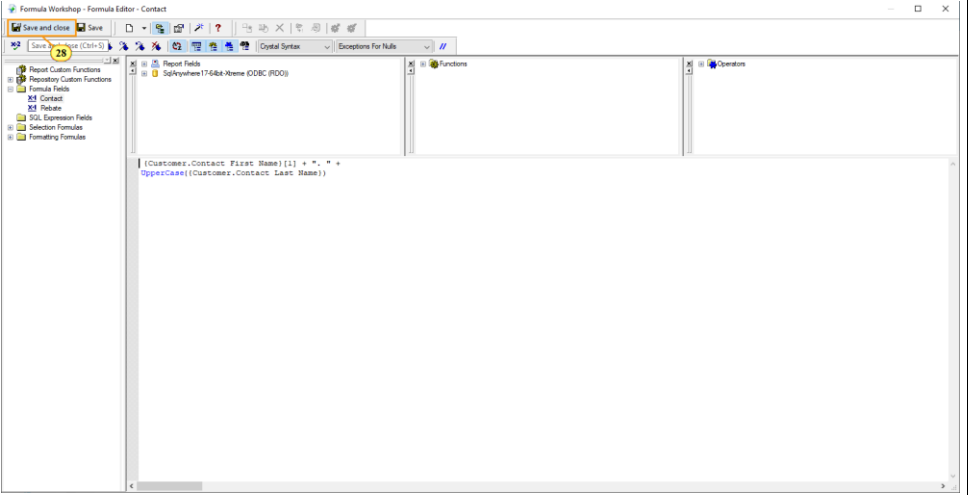

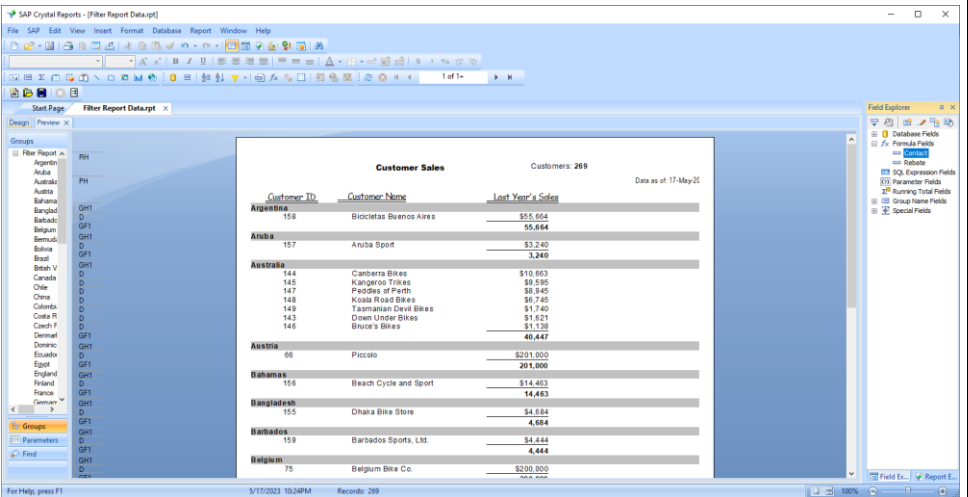
Explanation	Screenshot
14. Choose <i>Formula Fields</i> with the right-click.	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Field Explorer' pane on the right is open, and 'Formula Fields' is selected under the 'Fields' category. The report data is visible in the background.</p>
15. Choose <i>New</i> .	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Field Explorer' pane on the right is open, and 'New' is selected under the 'Formula Fields' category.</p>
16. In the <i>Name</i> field, enter Rebate .	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Field Explorer' pane on the right is open, and the 'Name' field is highlighted. The word 'Rebate' is entered in the 'Name' field.</p>

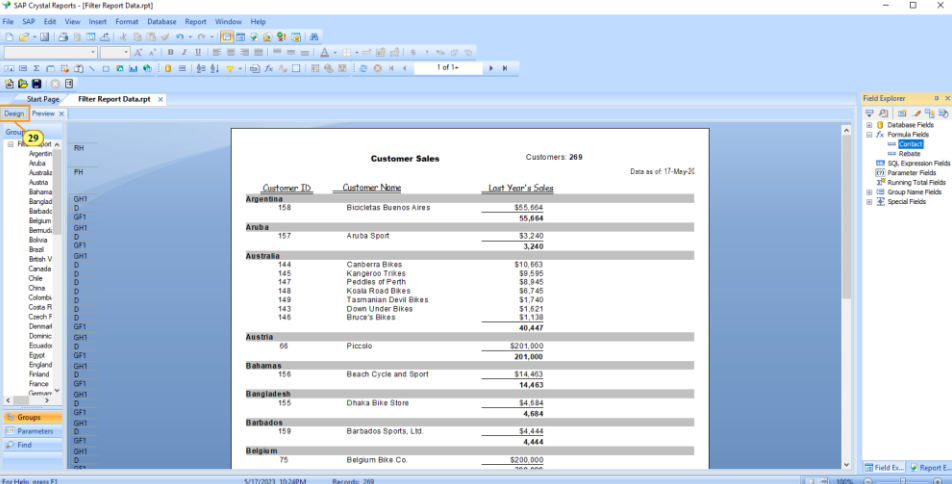
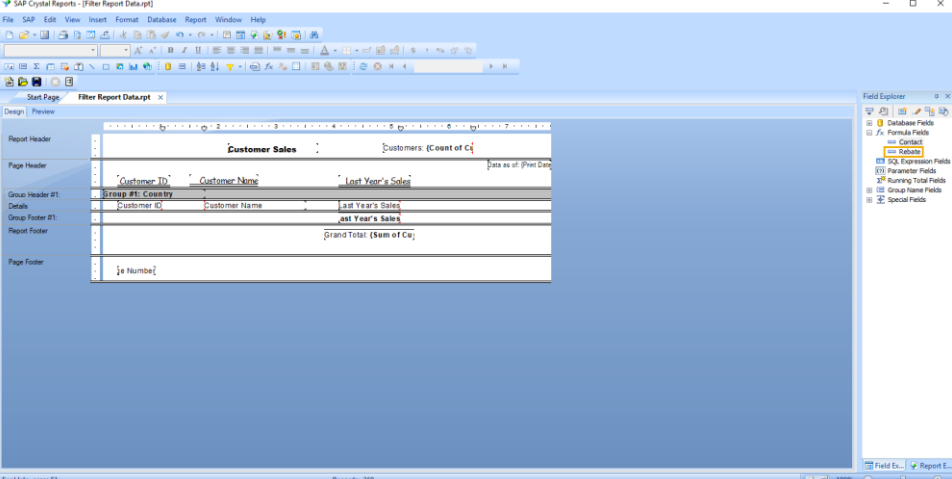
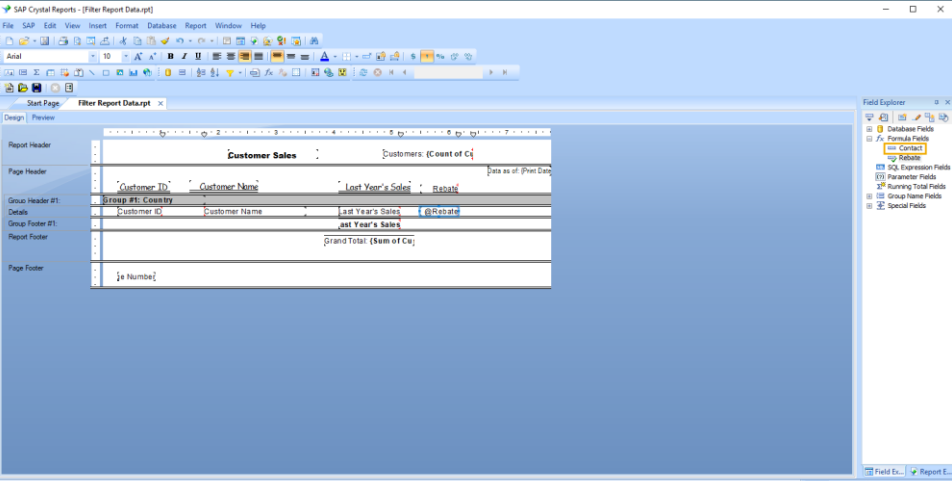
Explanation	Screenshot
<p>17. Choose OK.</p>	 <p>The screenshot shows the SAP Crystal Reports interface. A report titled 'Customer Sales' is displayed, showing a list of customers and their sales. A 'Filter Report Data' dialog box is open, and the 'OK' button is highlighted with a yellow circle and the number 17.</p>
<p>18. In the <i>Editor</i> field, enter {Customer.Last Year's Sales} * 0.03.</p>	 <p>The screenshot shows the SAP Crystal Reports Formula Workshop. The 'Editor' field is highlighted with a yellow circle and the number 18.</p>
<p>19. Choose Check.</p>	 <p>The screenshot shows the SAP Crystal Reports Formula Workshop. The 'Check' button is highlighted with a yellow circle and the number 19.</p>

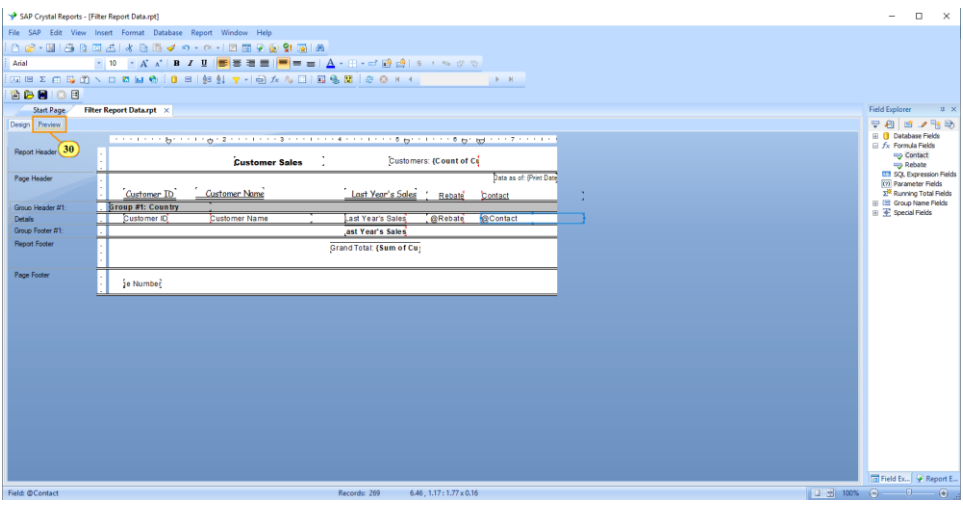

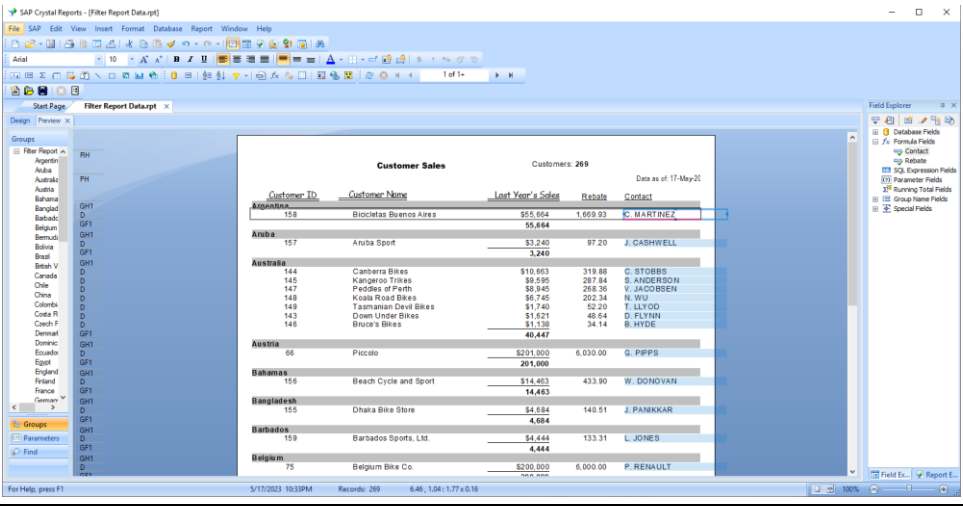
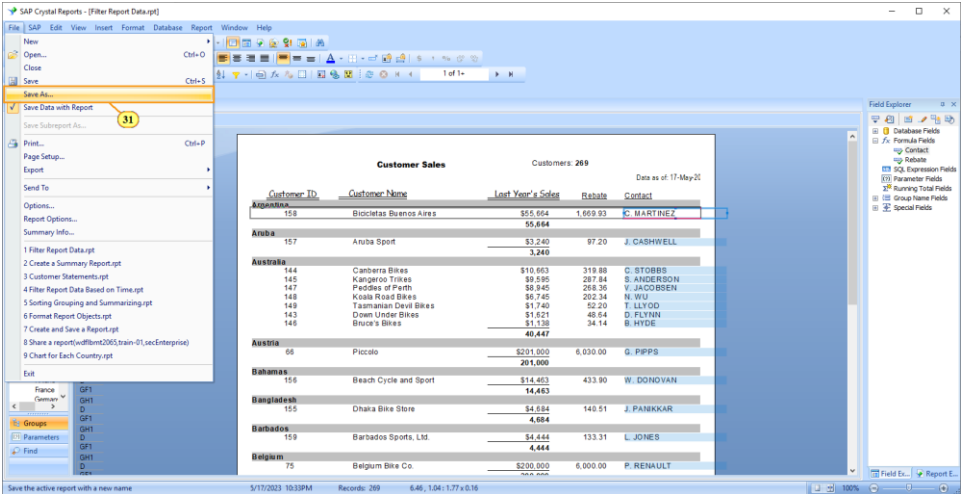
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21. Choose <i>Save and close</i> .																																																																																																																																																																	
<div></div> <p>In the following steps, you will add another formula field that concatenates the contact first letter with their last name in upper case.</p>	 <table><tr><th colspan="3">Customer Sales</th><th>Customers: 269</th><th>Date as of: 17-May-21</th></tr><tr><th>Customer ID</th><th>Customer Name</th><th>Last Year's Sales</th><th></th><th></th></tr><tr><td>Argentina</td><td></td><td></td><td></td><td></td></tr><tr><td>158</td><td>Bicicletas Buenos Aires</td><td>\$55,664</td><td></td><td></td></tr><tr><td></td><td></td><td>\$5,664</td><td></td><td></td></tr><tr><td>Aruba</td><td></td><td></td><td></td><td></td></tr><tr><td>157</td><td>Aruba Sport</td><td>\$3,240</td><td></td><td></td></tr><tr><td></td><td></td><td>\$,240</td><td></td><td></td></tr><tr><td>Australia</td><td></td><td></td><td></td><td></td></tr><tr><td>144</td><td>Canberra Bikes</td><td>\$10,663</td><td></td><td></td></tr><tr><td>145</td><td>Kangaroo Trains</td><td>\$9,595</td><td></td><td></td></tr><tr><td>147</td><td>Pedidos de Perth</td><td>\$8,945</td><td></td><td></td></tr><tr><td>148</td><td>Koala Road Bikes</td><td>\$6,745</td><td></td><td></td></tr><tr><td>149</td><td>Tasmanian Oval Bikes</td><td>\$1,740</td><td></td><td></td></tr><tr><td>143</td><td>Down Under Bikes</td><td>\$1,621</td><td></td><td></td></tr><tr><td>146</td><td>Bronx Bikes</td><td>\$1,138</td><td></td><td></td></tr><tr><td></td><td></td><td>\$0,447</td><td></td><td></td></tr><tr><td>Austria</td><td></td><td></td><td></td><td></td></tr><tr><td>66</td><td>Piccolo</td><td>\$201,000</td><td></td><td></td></tr><tr><td></td><td></td><td>\$01,000</td><td></td><td></td></tr><tr><td>Bahamas</td><td></td><td></td><td></td><td></td></tr><tr><td>156</td><td>Beach Cycle and Sport</td><td>\$14,483</td><td></td><td></td></tr><tr><td></td><td></td><td>\$4,483</td><td></td><td></td></tr><tr><td>Bangladesh</td><td></td><td></td><td></td><td></td></tr><tr><td>155</td><td>Dhaka Bike Store</td><td>\$4,684</td><td></td><td></td></tr><tr><td></td><td></td><td>\$,684</td><td></td><td></td></tr><tr><td>Barbados</td><td></td><td></td><td></td><td></td></tr><tr><td>159</td><td>Barbados Sports, Ltd.</td><td>\$4,444</td><td></td><td></td></tr><tr><td></td><td></td><td>\$,444</td><td></td><td></td></tr><tr><td>Belgium</td><td></td><td></td><td></td><td></td></tr><tr><td>75</td><td>Belgium Bike Co.</td><td>\$200,000</td><td></td><td></td></tr><tr><td></td><td></td><td>\$00,000</td><td></td><td></td></tr></table>	Customer Sales			Customers: 269	Date as of: 17-May-21	Customer ID	Customer Name	Last Year's Sales			Argentina					158	Bicicletas Buenos Aires	\$55,664					\$5,664			Aruba					157	Aruba Sport	\$3,240					\$,240			Australia					144	Canberra Bikes	\$10,663			145	Kangaroo Trains	\$9,595			147	Pedidos de Perth	\$8,945			148	Koala Road Bikes	\$6,745			149	Tasmanian Oval Bikes	\$1,740			143	Down Under Bikes	\$1,621			146	Bronx Bikes	\$1,138					\$0,447			Austria					66	Piccolo	\$201,000					\$01,000			Bahamas					156	Beach Cycle and Sport	\$14,483					\$4,483			Bangladesh					155	Dhaka Bike Store	\$4,684					\$,684			Barbados					159	Barbados Sports, Ltd.	\$4,444					\$,444			Belgium					75	Belgium Bike Co.	\$200,000					\$00,000		
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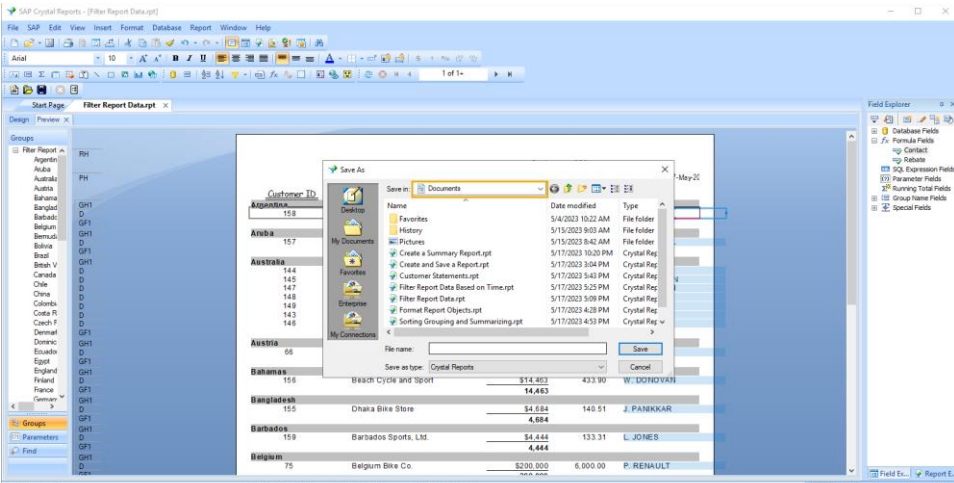
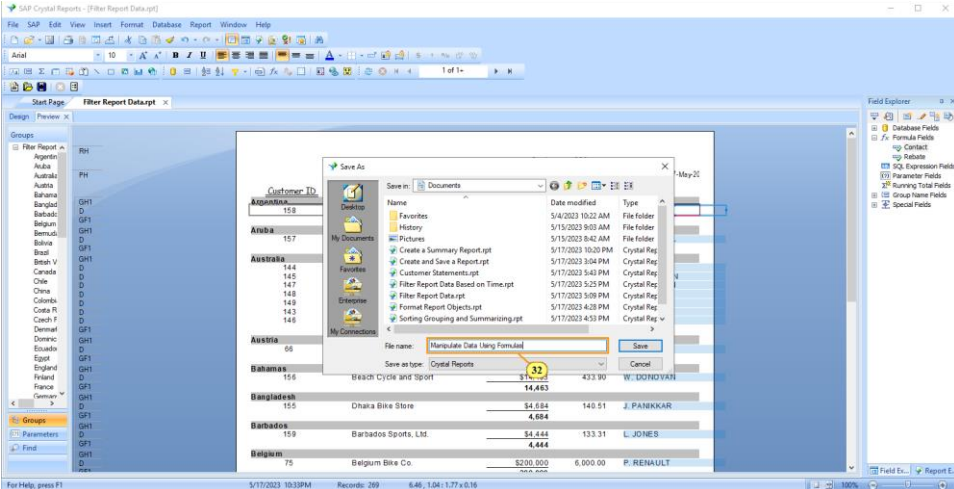
Explanation	Screenshot
22. Choose <i>Formula Fields</i> with the right-click.	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Field Explorer' pane on the right is open, and 'Formula Fields' is selected under the 'Fields' category. The report data is visible in the background.</p>
23. Choose <i>New</i> .	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Field Explorer' pane on the right is open, and 'New' is selected under the 'Formula Fields' category. The report data is visible in the background.</p>
24. In the <i>Name</i> field, enter Contact .	 <p>The screenshot shows the SAP Crystal Reports interface. The 'Field Explorer' pane on the right is open, and 'New' is selected under the 'Formula Fields' category. A dialog box is open for naming the formula field, and 'Contact' is entered in the 'Name' field.</p>

Explanation	Screenshot
<p>25. Choose OK.</p>	
<p> In the Editor field, enter the following formula:</p> <pre>{Customer.Contact First Name}[1] + ". " + UpperCase ({Customer.Contact Last Name})</pre> <p>For this tutorial, this step has been performed for you.</p>	
<p>26. Choose Check.</p>	

Explanation	Screenshot
27. Choose OK .	
28. Choose Save and close .	
<p> In the following steps, you will add the new fields to the report.</p>	

Explanation	Screenshot
<p>29. Choose <i>Design</i>.</p>	
<p>Drag <i>Rebate</i> and drop it on the Details section.</p> <p>For this tutorial, this step has been performed for you.</p>	
<p>Drag <i>Contact</i> and drop it on the Details section.</p> <p>For this tutorial, this step has been performed for you.</p>	

Explanation	Screenshot
<p>30. Choose <i>Preview</i>.</p>	
<p> In the following steps, you will save the report.</p>	
<p>31. Choose <i>File > Save As</i></p>	

Explanation	Screenshot
<p>i</p> <p>The <i>My Documents</i> folder has already been selected.</p>	
<p>32. In the <i>File name</i> field, enter Manipulate Data Using Formulas and choose Save.</p>	
<p>i</p> <p>You have now seen how to manipulate data using formulas.</p> <p>This concludes the interactive tutorial.</p>	