

Applying an Aggregate Function

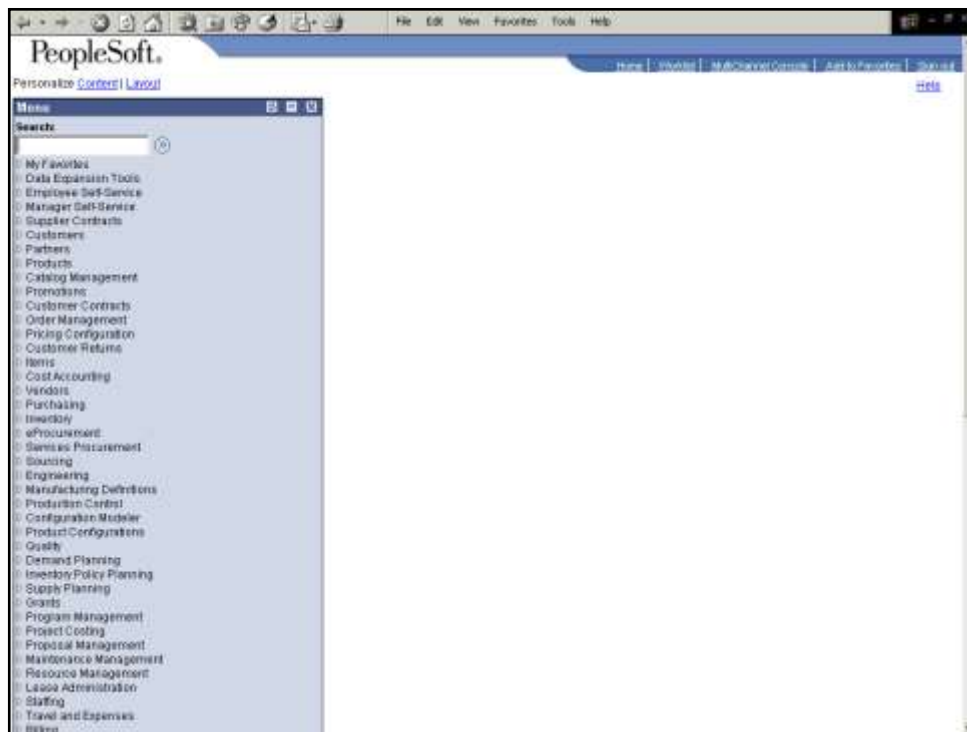
An **aggregate function** is a special type of operator that returns a single value based on multiple rows of data. When your query includes one or more aggregate functions, PeopleSoft Query collects related rows and displays a single row that summarizes their contents.

For example, suppose you create an Order query that includes Customer ID and Amount fields for each item ordered. You want to find out how much each customer has ordered. Without any aggregate functions, this query would return one row for every customer and amount combination. If you apply the aggregate function **Sum** to the Amount field, the query can be narrowed down to display one row that summarizes the amount for each customer.

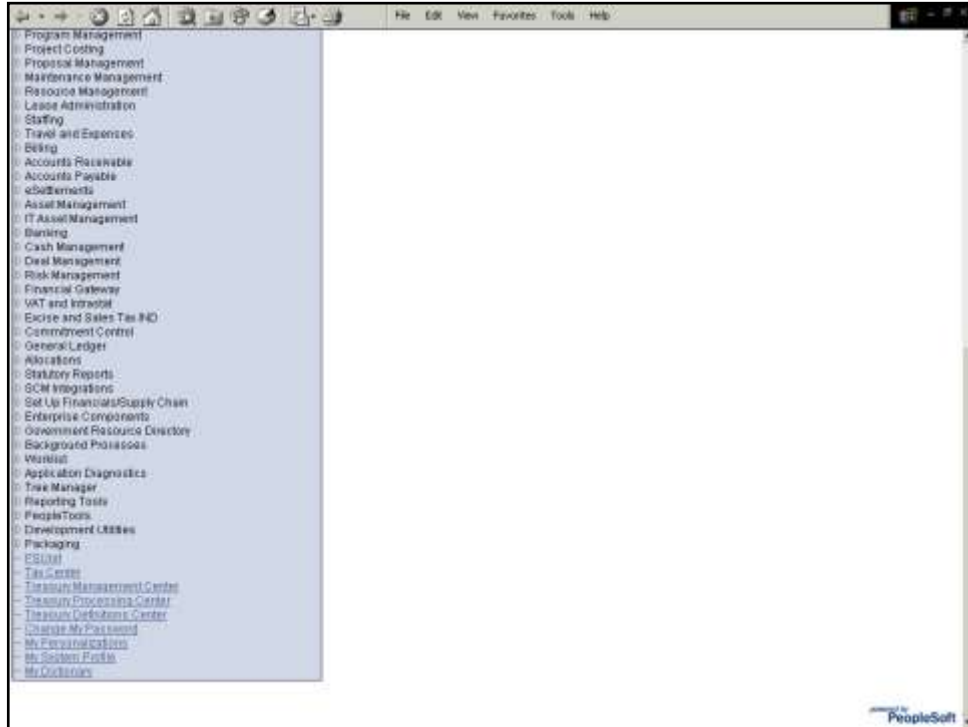
When you apply an aggregate function to a field, you are redefining how PeopleSoft Query uses the field throughout the query. Essentially, the application replaces the field, wherever it occurs, with the results of the function. If you select the field as a display column, PeopleSoft Query displays the aggregate values. However, if you use the field as an order by column, the application organizes the results in an order that is based on the aggregate values.

In this topic, you need to create a query to display the total number of invoices in a table. To this query, you will add the **Count** aggregate function. The query will return a single row of data displaying the total number of rows in the table. Then, you will display the invoice count categorized by the invoice types.

Procedure



Step	Action
1.	Begin by navigating to the Records page. Click the vertical scrollbar.



Step	Action
2.	Click the Reporting Tools link. ▶ Reporting Tools



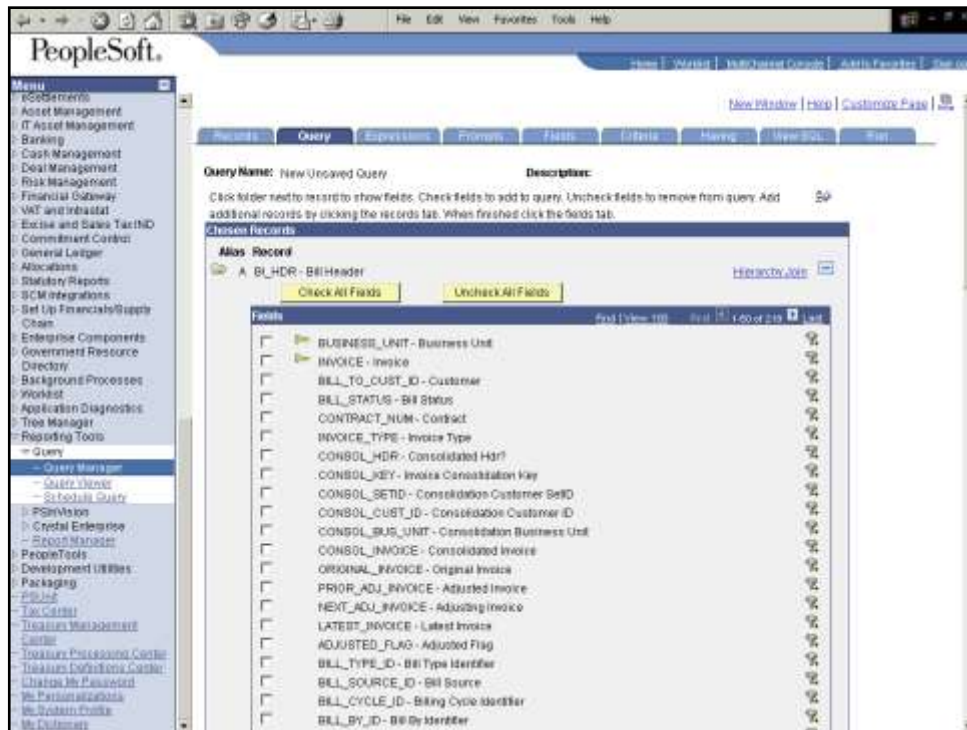
Step	Action
3.	Click the Query Manager link. <div style="border: 1px solid black; padding: 2px; display: inline-block;">Query Manager</div>



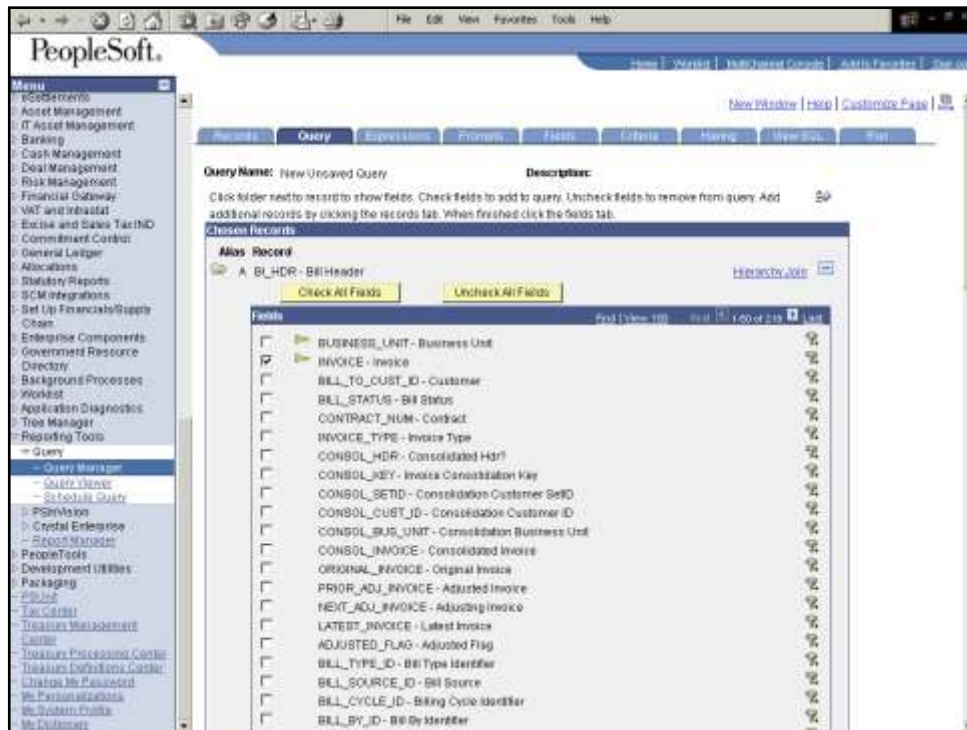
Step	Action
4.	Click the Create New Query link.
5.	The Records page enables you to select the records upon which to base the new query. You can search for existing records by entering appropriate keywords.



Step	Action
6.	You need to create a query based on the Bill Header record. Enter a key word to search for this record. Enter the desired information into the Description field. Enter " BI_HDR ".
7.	Click the Search button. Search
8.	To create a query based on the BI_HDR record, navigate to the Query page for this record. Click the Add Record link. Add Record
9.	The Query page appears, displaying several fields. Use this page to add fields to a query.



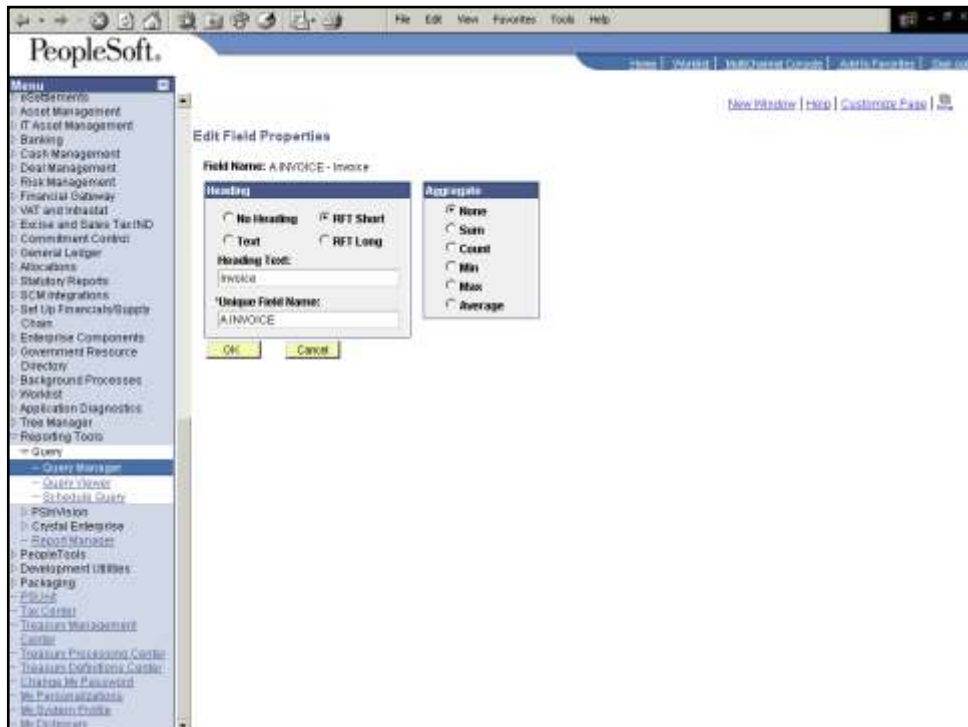
Step	Action
10.	Add the INVOICE field to the query. Click the Fields option. <input type="checkbox"/>






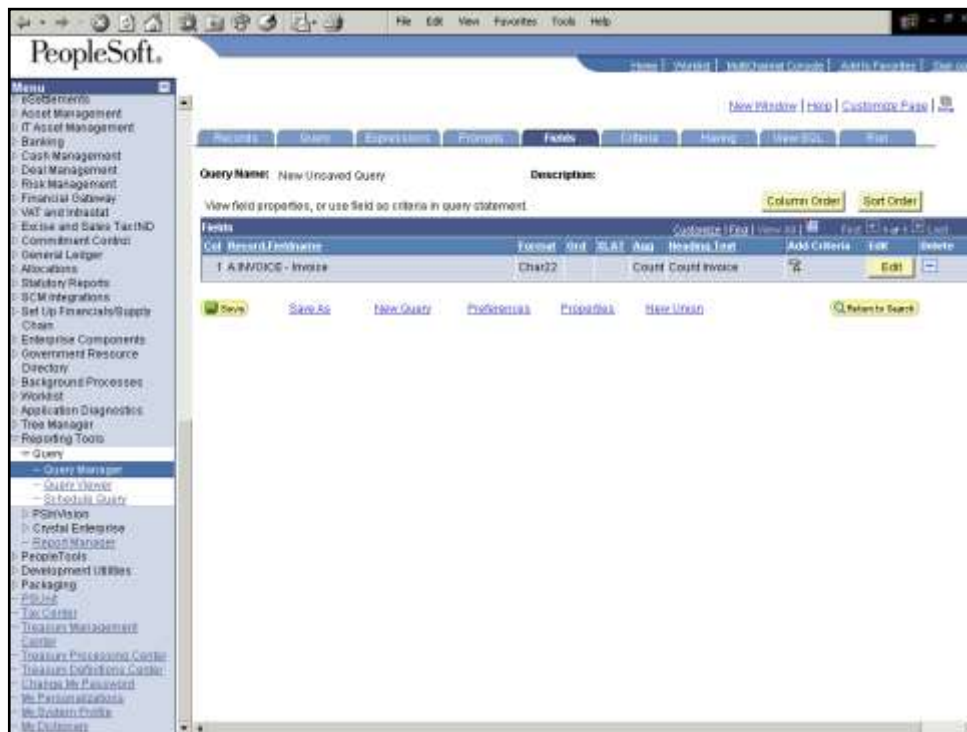
Step	Action
11.	Next, you need to modify the INVOICE field on the Fields page. Click the Fields tab. <input type="button" value="Fields"/>
12.	The Fields page enables you to view how fields are selected for output, view the properties of each field, and change headings, order-by numbers, and aggregate values.




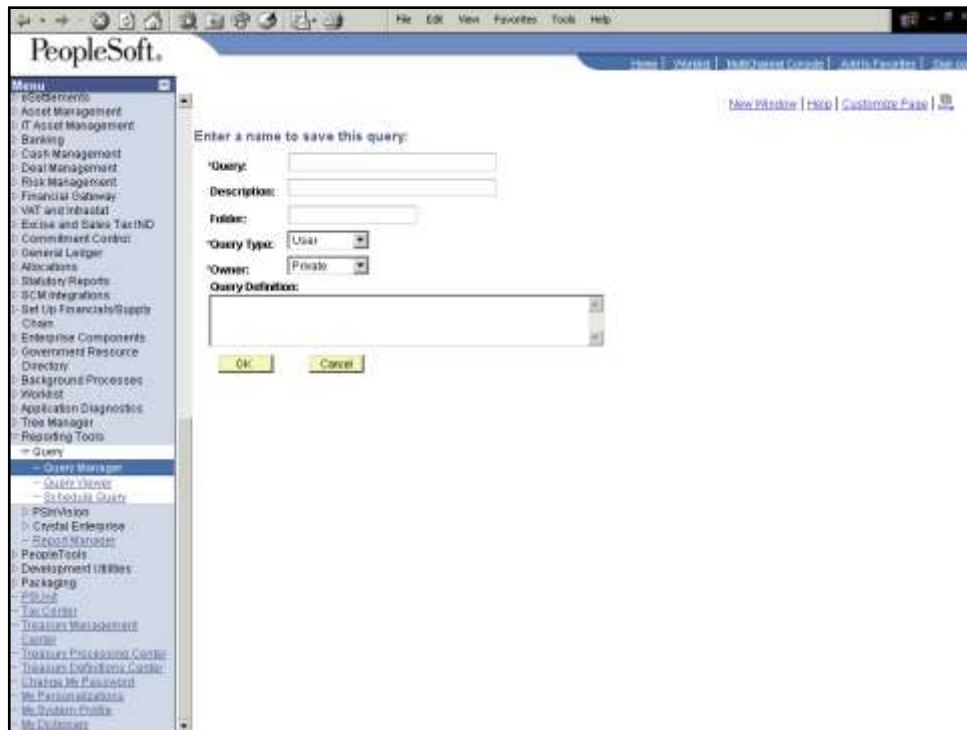
Step	Action
13.	Click the Edit button. <div style="border: 1px solid black; padding: 2px; display: inline-block;">Edit</div>



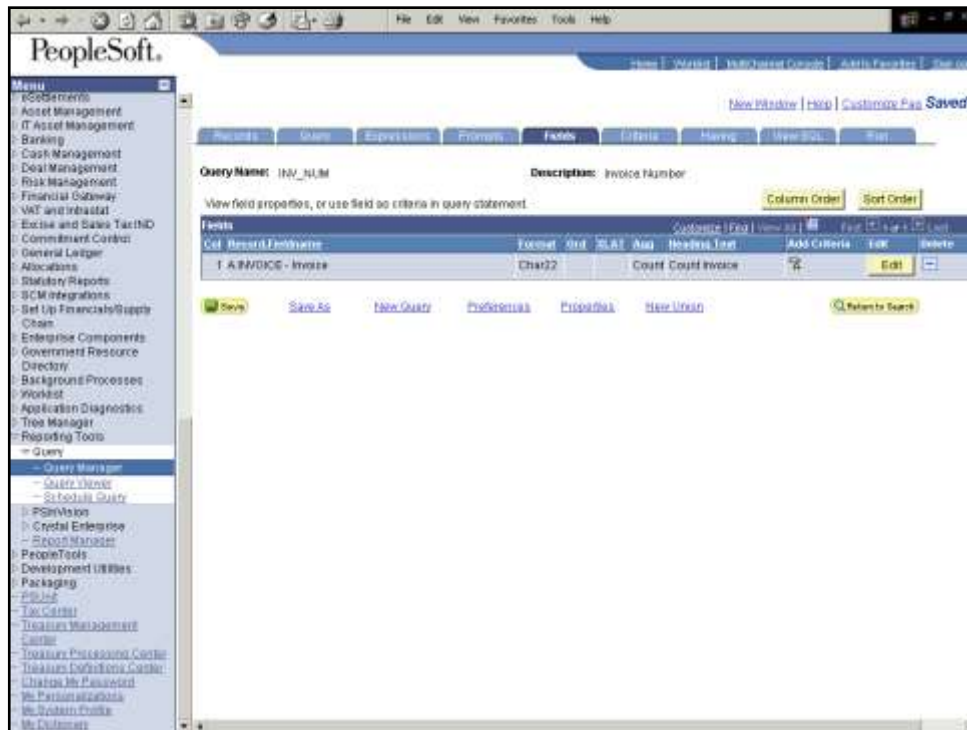
Step	Action
14.	You want to change the heading text of the INVOICE field to Count Invoice. Click the Text option. 
15.	Click in the Heading Text field. <input type="text" value="Invoice"/>
16.	Enter the desired information into the Heading Text field. Enter " Count Invoice ".
17.	Add an aggregate function to the field. In this example, you want to display the total number of invoices in the BI_HDR table. Click the Count option. 
18.	Click the OK button. 





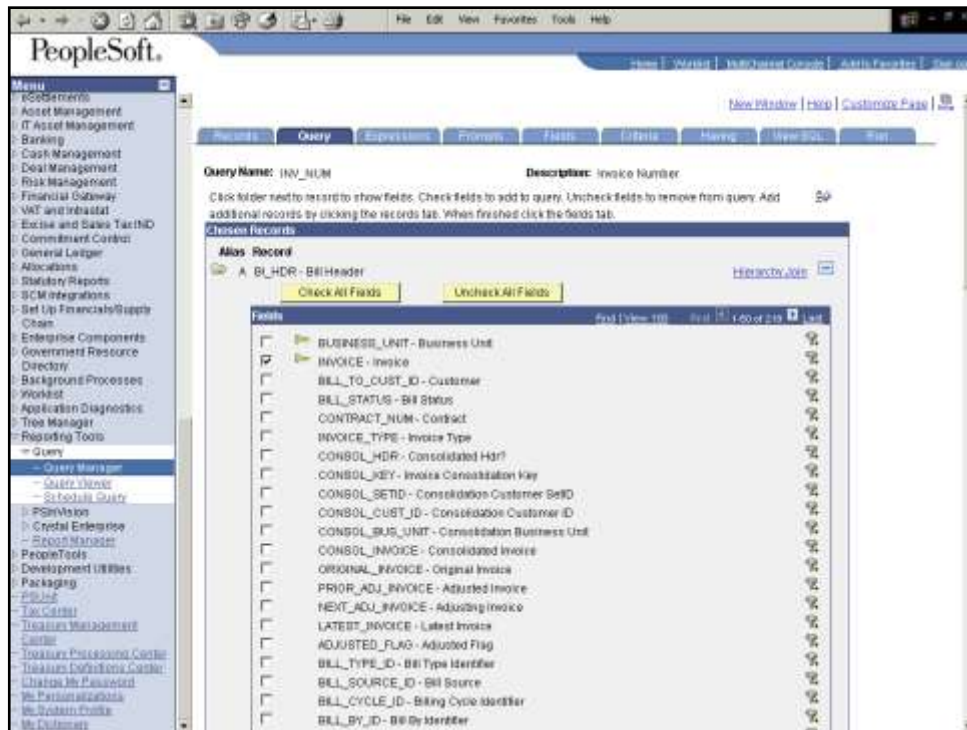
Step	Action
19.	Click the Save button. 



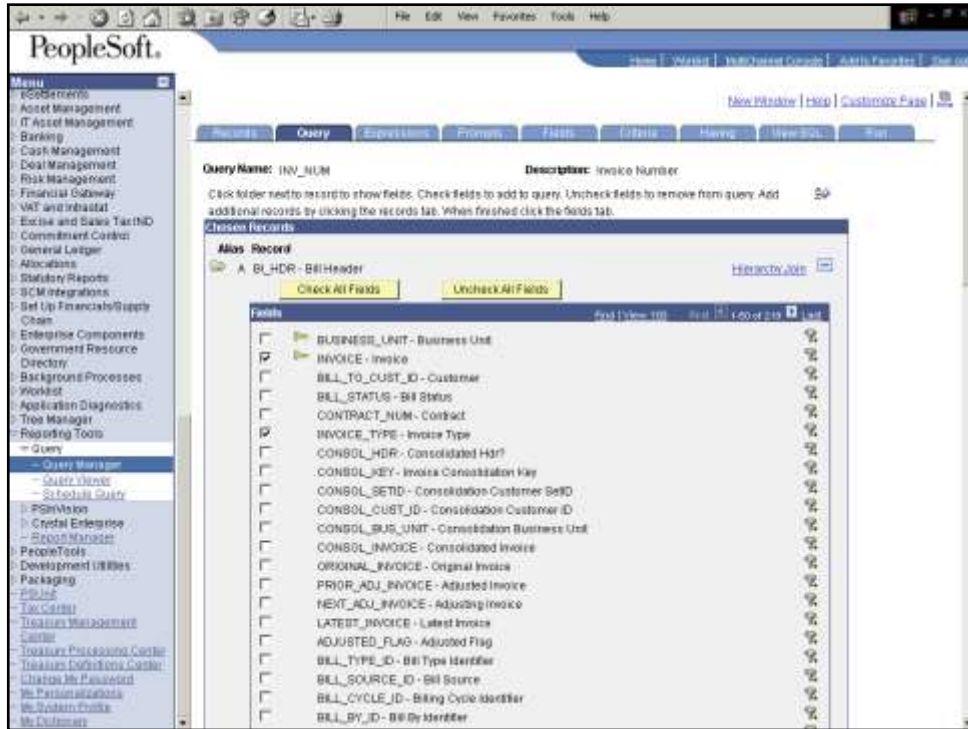
Step	Action
20.	Enter the desired information into the *Query field. Enter " INV_NUM ".
21.	Click in the Description field. <input type="text"/>
22.	Enter the desired information into the Description field. Enter " Invoice Number ".
23.	Click the OK button. <input type="button" value="OK"/>



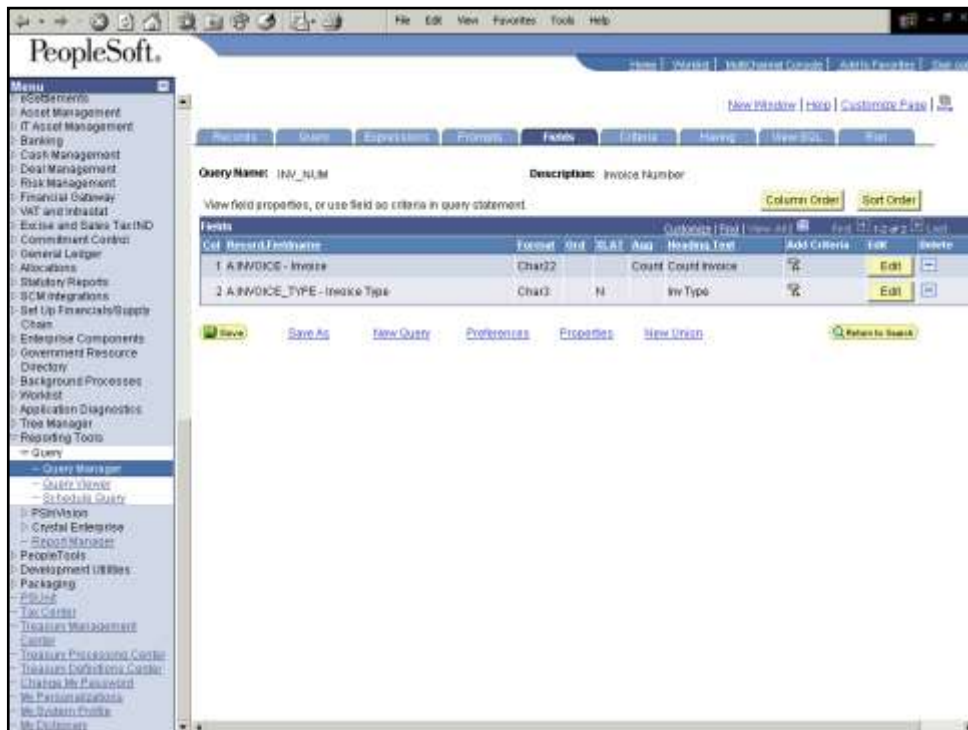
Step	Action
24.	Next, run the query. Click the Run tab. 
25.	The Run page displays the total count of the invoices in the BI_HDR table, which is 273.
26.	Now, display the invoice count categorized by the invoice types. Click the Query tab. 




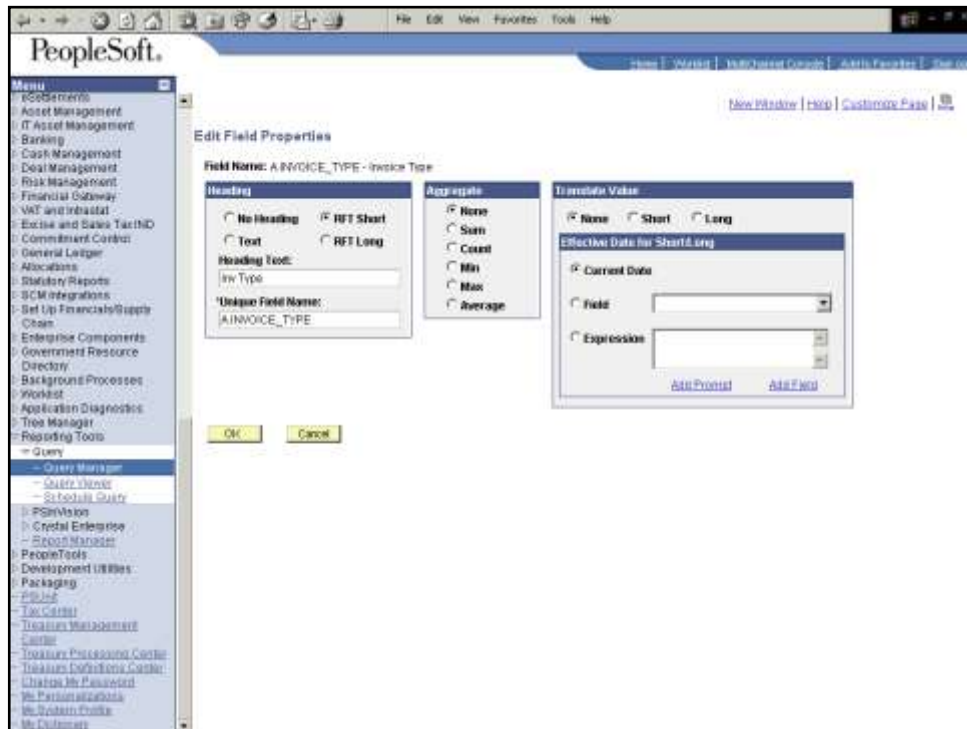
Step	Action
27.	Add the INVOICE_TYPE field to the query. Click the Fields option. <input type="checkbox"/>





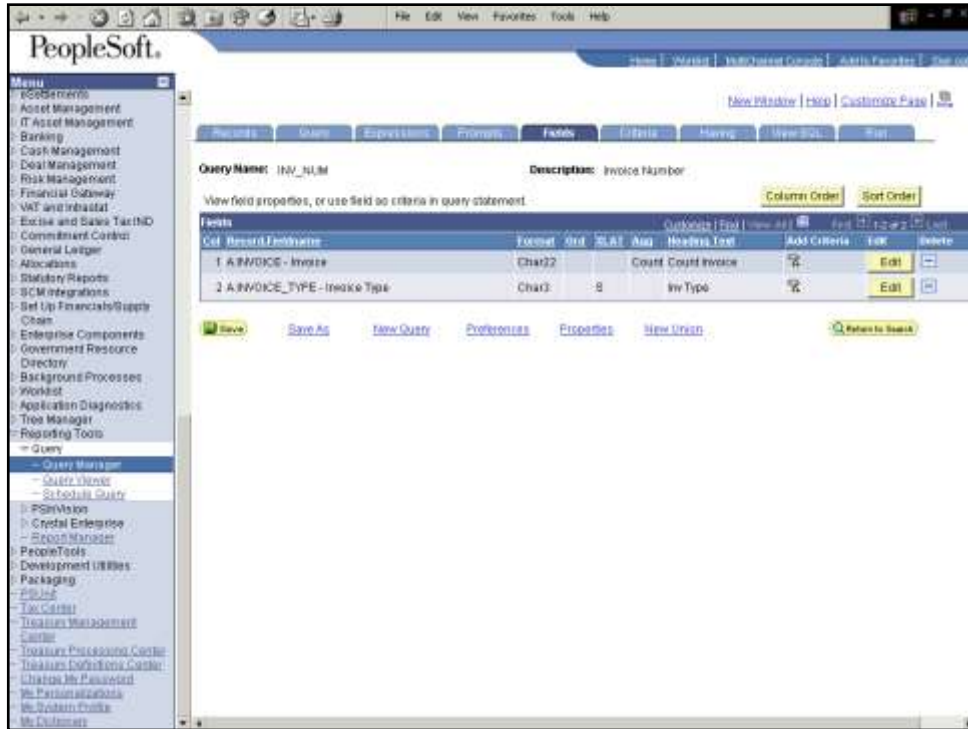
Step	Action
28.	Click the Fields tab. <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-top: 5px;">Fields</div>




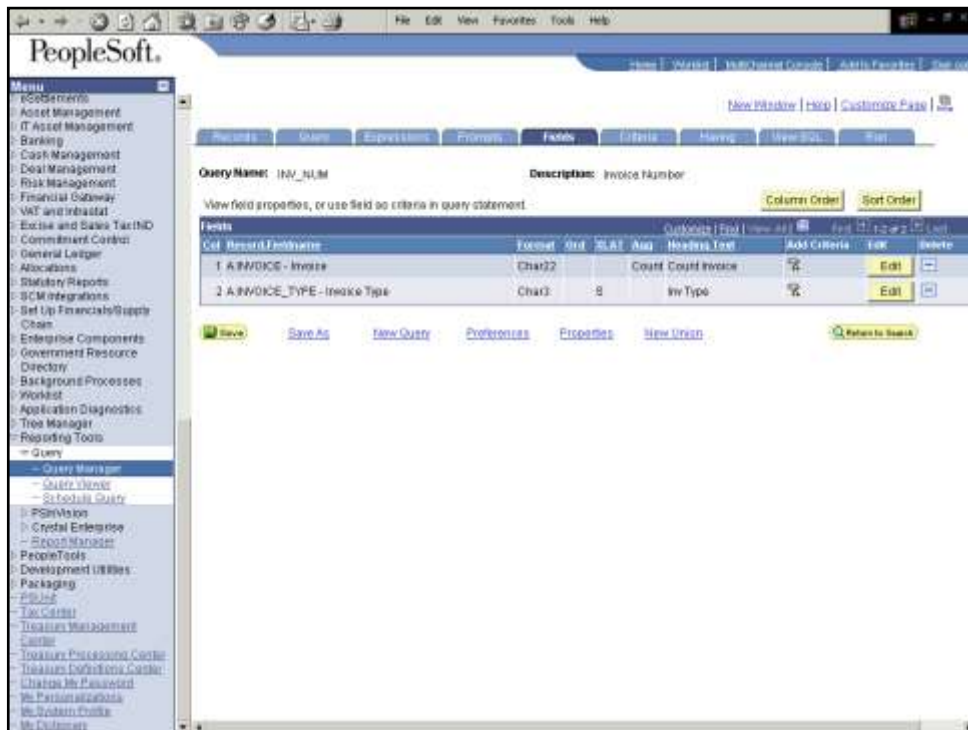
Step	Action
29.	Click the Edit button. 




30.	Click the Short option. 
31.	Click the OK button. 



Step	Action
32.	Click the Save button. 



Step	Action
33.	Finally, run the query. Click the Run tab. 
34.	Notice that the total number of invoices, which was 273, has been categorized by invoice types.
35.	You successfully added an aggregate function to a query. End of Procedure.