



### Applying an Aggregate Function

#### Concept

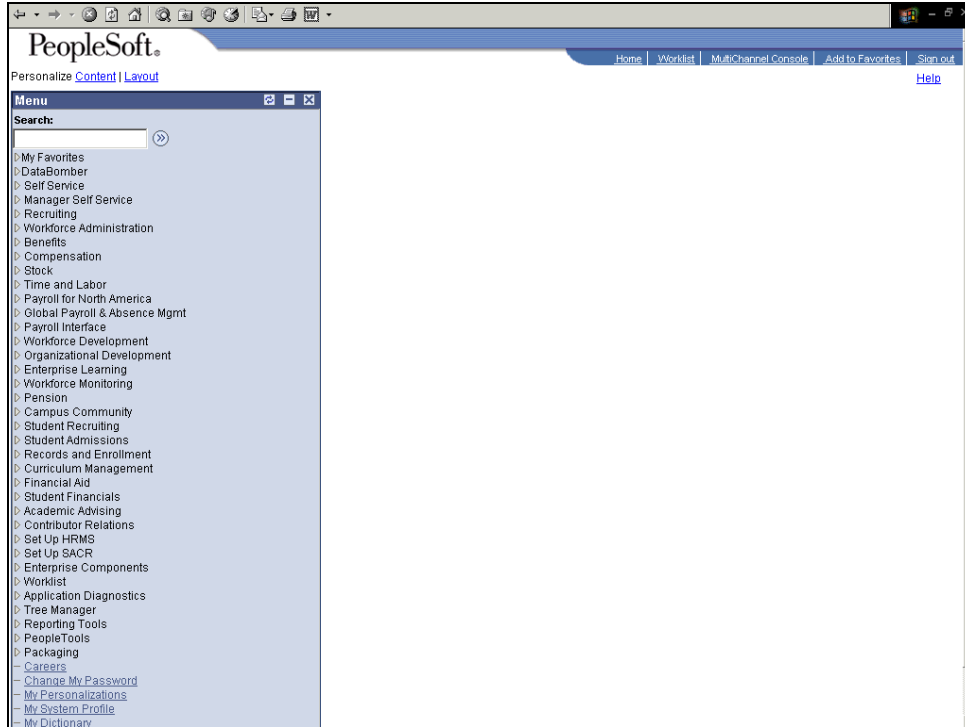
An **aggregate function** is a special type of operator that returns a single value based on multiple rows of data. When your query includes one or more aggregate functions, PeopleSoft Query collects related rows and displays a single row that summarizes their contents.


For example, suppose you create a query that includes Employee ID and Amount fields for each service indicator. You want to find out the total amount of fees owed from all the service indicators that have been placed on a person's records. Without any aggregate functions, this query would return one row for every employee and service indicator 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 employee.

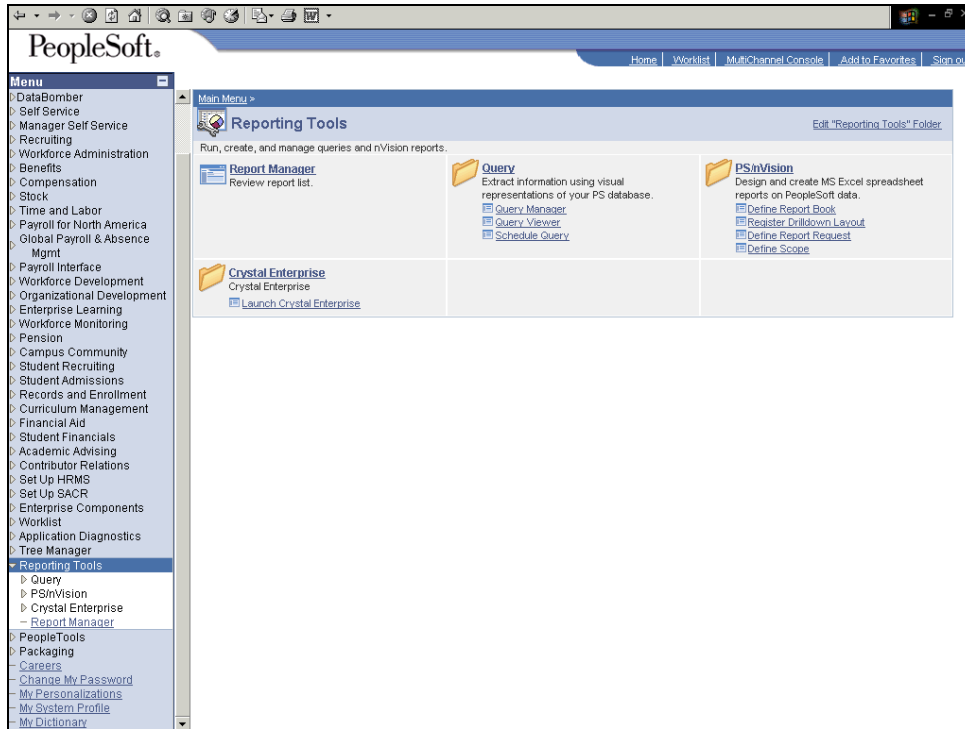
When you apply an aggregate function to a field, you are redefining how PeopleSoft Query uses the field throughout the query. Essentially, the application replaces the field, wherever it occurs, with the results of the function. If you select the field as a display column, PeopleSoft Query displays the 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 would like to know how many students are in each career for each academic term. You will perform an aggregate function of **Count** on the **EMPLID** field.

### Procedure



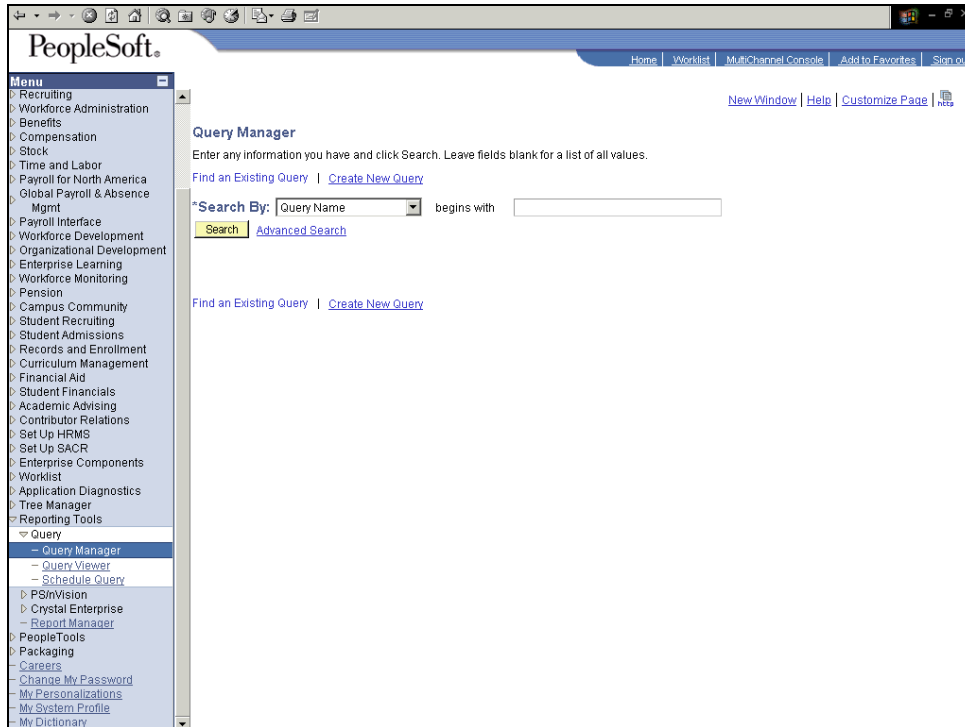
Step	Action
1.	Begin by navigating to the <b>Records</b> page. Click the <b>Reporting Tools</b> link. 



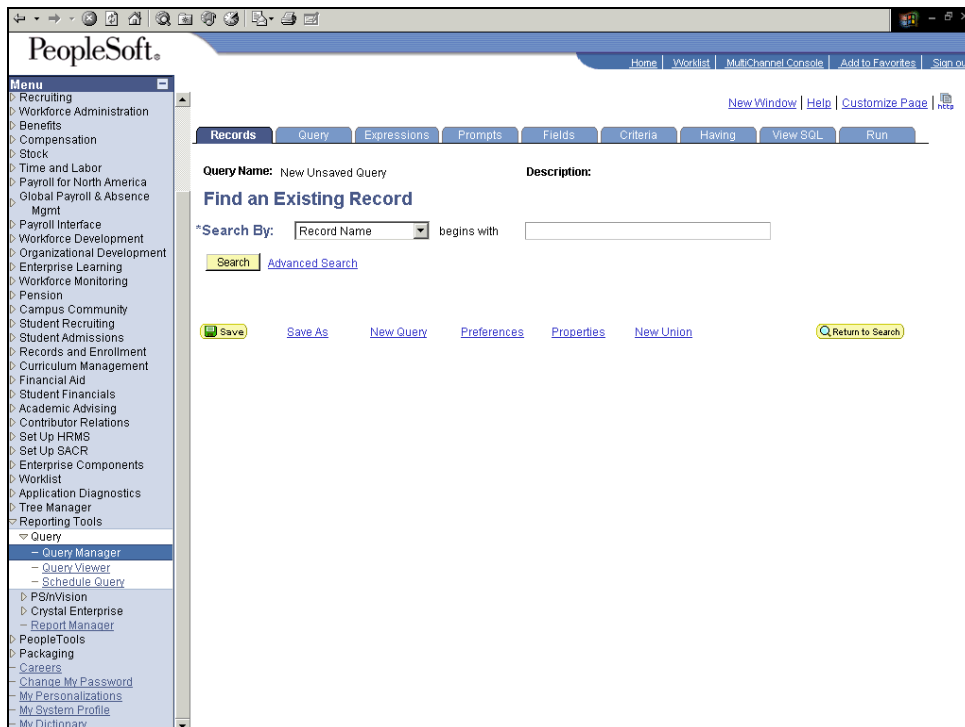
Step	Action
2.	Click the <b>Query Manager</b> link. 



# Process Document

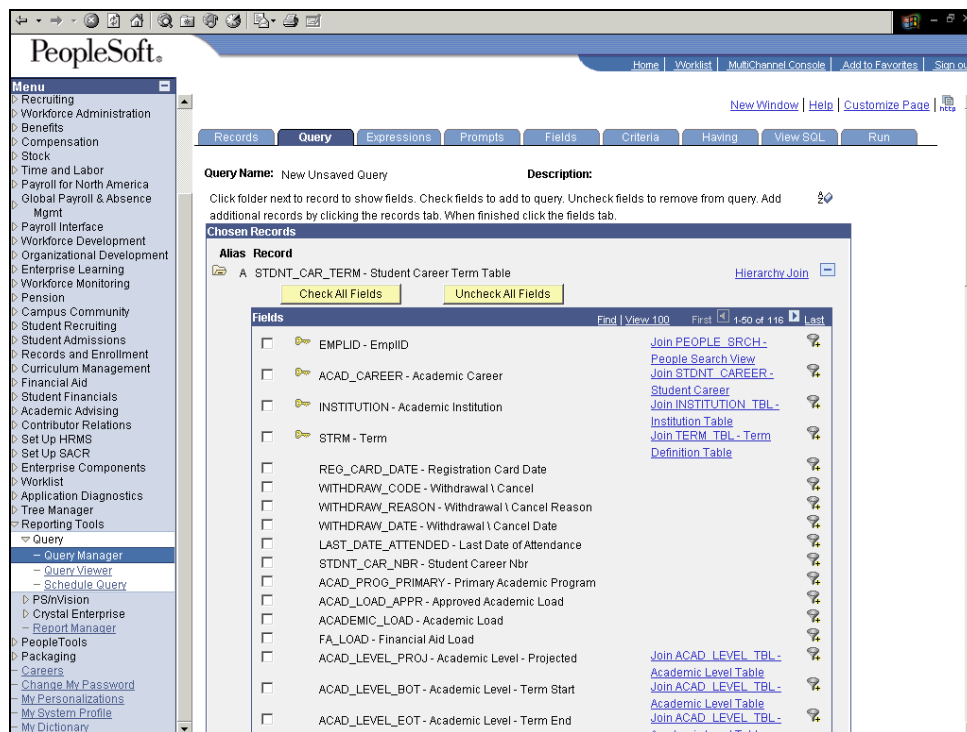
## Applying an Aggregate Function



Step	Action
3.	Click the <b>Create New Query</b> link.



Step	Action
4.	The first step in creating a query is to find an existing record for the query. In this example, you will locate and use the Student Career Term Table record. Enter the desired information into the <b>Description</b> field. Enter " <b>STDNT_CAR_TERM</b> ".
5.	Click the <b>Search</b> button. 
6.	Click the <b>Add Record</b> link. 



Step	Action
7.	Next, specify the fields for the query. Click the <b>EMPLID</b> option. <input type="checkbox"/>
8.	Click the <b>ACAD_CAREER</b> option. <input type="checkbox"/>
9.	Click the <b>STRM</b> option. <input type="checkbox"/>

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## Applying an Aggregate Function



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Records | **Query** | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run

Query Name: New Unsavd Query      Description:

Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add additional records by clicking the records tab. When finished click the fields tab.

Chosen Records

Alias Record

A STDNT\_CAR\_TERM - Student Career Term Table      Hierarchy Join

Check All Fields      Uncheck All Fields

Fields	Find	View 100	First	1-50 of 116	Last
<input checked="" type="checkbox"/> EMPID - EmpID	Join PEOPLE_SRCH - People Search View	Join STDNT_CAREER - Student Career	Join INSTITUTION_TBL - Institution Table	Join TERM_TBL - Term Definition Table	
<input checked="" type="checkbox"/> ACAD_CAREER - Academic Career					
<input type="checkbox"/> INSTITUTION - Academic Institution					
<input checked="" type="checkbox"/> STRM - Term					
<input type="checkbox"/> REG_CARD_DATE - Registration Card Date					
<input type="checkbox"/> WITHDRAW_CODE - Withdrawal \ Cancel					
<input type="checkbox"/> WITHDRAW_REASON - Withdrawal \ Cancel Reason					
<input type="checkbox"/> WITHDRAW_DATE - Withdrawal \ Cancel Date					
<input type="checkbox"/> LAST_DATE_ATTENDED - Last Date of Attendance					
<input type="checkbox"/> STDNT_CAR_NBR - Student Career Nbr					
<input type="checkbox"/> ACAD_PROG_PRIMARY - Primary Academic Program					
<input type="checkbox"/> ACAD_LOAD_APPR - Approved Academic Load					
<input type="checkbox"/> ACADEMIC_LOAD - Academic Load					
<input type="checkbox"/> FA_LOAD - Financial Aid Load					
<input type="checkbox"/> ACAD_LEVEL_PROJ - Academic Level - Projected	Join ACAD_LEVEL_TBL - Academic Level Table				
<input type="checkbox"/> ACAD_LEVEL_BOT - Academic Level - Term Start	Join ACAD_LEVEL_TBL - Academic Level Table				
<input type="checkbox"/> ACAD_LEVEL_EOT - Academic Level - Term End	Join ACAD_LEVEL_TBL - Academic Level Table				

Step	Action
10.	Click the <b>Fields</b> tab.

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Records | Query | Expressions | Prompts | **Fields** | Criteria | Having | View SQL | Run

Query Name: New Unsavd Query      Description:

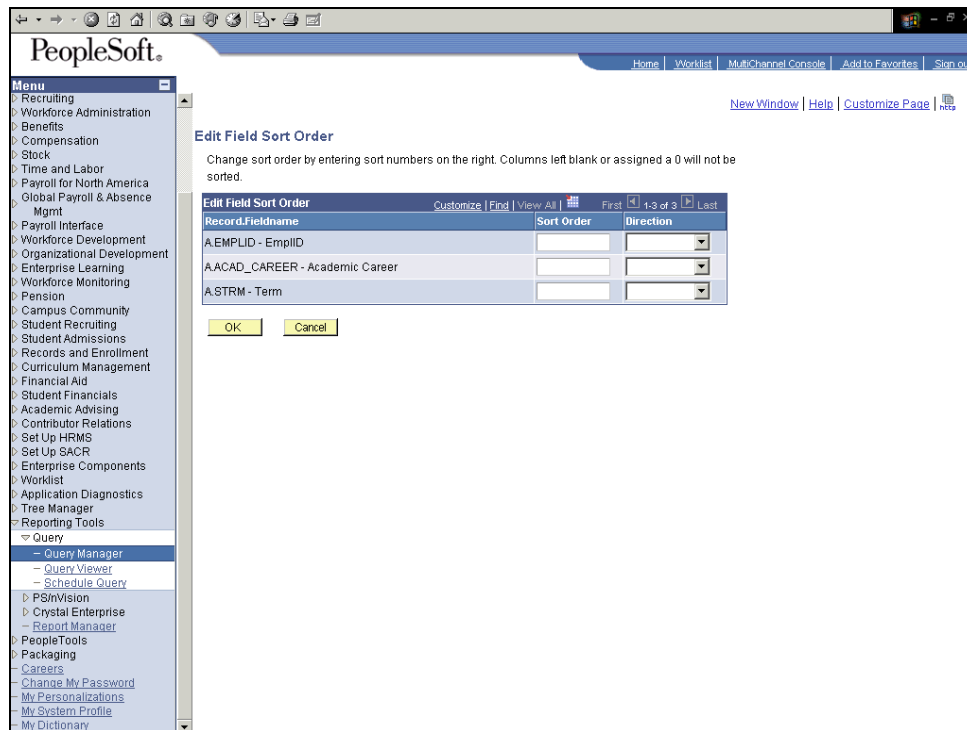
View field properties, or use field as criteria in query statement.

Column Order      Sort Order

Col	Record	Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A	EMPLID - EmpID	Char11				ID		Edit	
2	A	ACAD_CAREER - Academic Career	Char4				Career		Edit	
3	A	STRM - Term	Char4				Term		Edit	

Save      Save As      New Query      Preferences      Properties      New Union      Return to Search

Step	Action
11.	<p>Use the <b>Fields</b> page to view how fields are selected for output, view the properties of each field, change headings, change column and sort orders, and apply aggregate values.</p> <p>In this example, you first want to sort the results by Career, then by Term. Click the <b>Sort Order</b> button.</p> <p><input type="button" value="Sort Order"/></p>


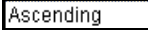



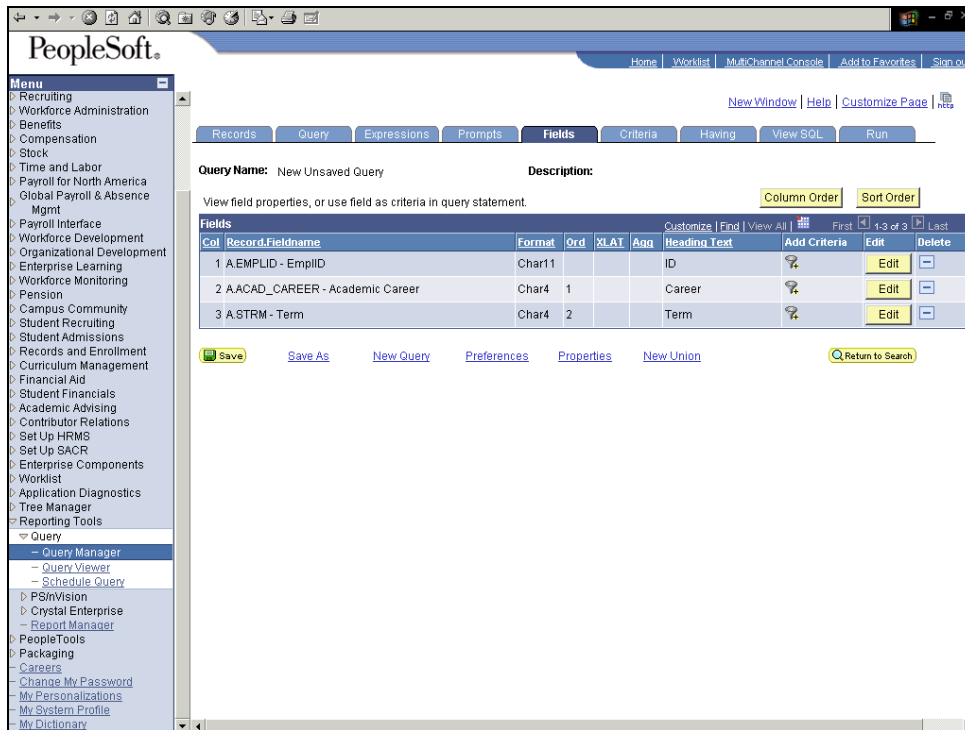
Step	Action
12.	Enter the desired information into the <b>Sort Order</b> field. Enter "1".
13.	Click the <b>Direction</b> list. <input type="text" value=""/>
14.	Click an entry in the list. <input type="text" value="Ascending"/>
15.	Click in the <b>Sort Order</b> field. <input type="text" value=""/>
16.	Enter the desired information into the <b>Sort Order</b> field. Enter "2".


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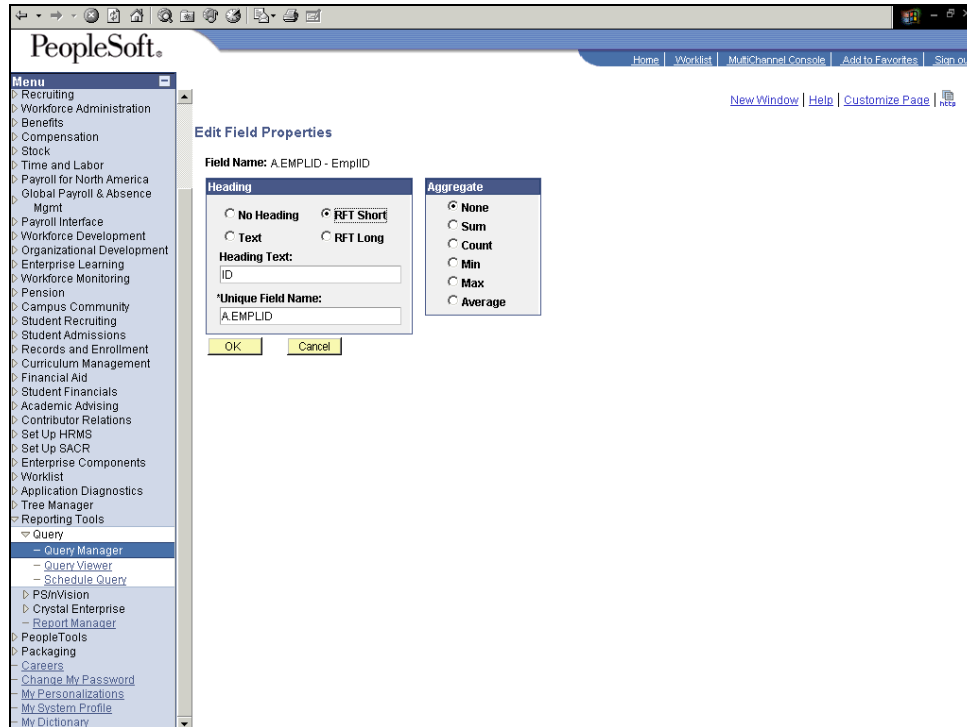
## Applying an Aggregate Function



Step	Action
17.	Click the <b>Direction</b> list. 
18.	Click an entry in the list. 
19.	Click the <b>OK</b> button. 



Step	Action
20.	Next, you want to apply an aggregate function to the EMPLID field to get a count of each ID. Click the <b>Edit</b> button. 



Step	Action
21.	<p>You can apply the following aggregate functions to a field:</p> <ul style="list-style-type: none"> <li>• <b>Sum:</b> Adds the values from each row and displays the total.</li> <li>• <b>Count:</b> Counts the number of rows.</li> <li>• <b>Min:</b> Checks the value from each row and returns the lowest one.</li> <li>• <b>Max:</b> Checks the value from each row and returns the highest one.</li> <li>• <b>Average:</b> Adds the values from each row and divides the result by the number of rows.</li> </ul> <p>In this example, you want a total count for each ID. Click the <b>Count</b> option.</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <input checked="" type="radio"/> Count         </div>
22.	<p>Click the <b>OK</b> button.</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <input type="button" value="OK"/> </div>

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Records | Query | Expressions | Prompts | **Fields** | Criteria | Having | View SQL | Run

Query Name: New Unsavd Query      Description:

View field properties, or use field as criteria in query statement.      Column Order      Sort Order

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - EmplID	Char11			Count	Count ID		Edit	
2	A.ACAD_CAREER - Academic Career	Char4	1			Career		Edit	
3	A.STRM - Term	Char4	2			Term		Edit	

Save      Save As      New Query      Preferences      Properties      New Union      Return to Search

Step	Action
23.	Click the <b>Save As</b> link.

[Save As](#)

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Enter a name to save this query as:

\*Query:

Description:

Folder:

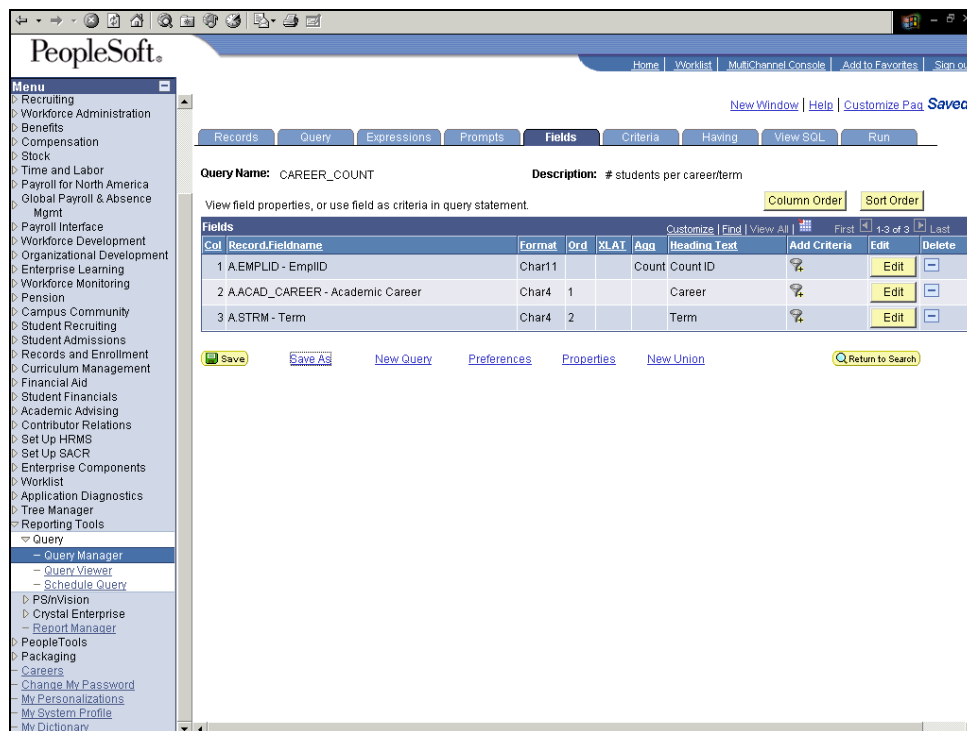
\*Query Type: User

\*Owner: Private

Query Definition:

OK      Cancel

Step	Action
24.	Enter the desired information into the * <b>Query</b> field. Enter " <b>CAREER_COUNT</b> ".
25.	Click in the <b>Description</b> field. <input type="text"/>
26.	Enter the desired information into the <b>Description</b> field. Enter " <b># students per career/term</b> ".
27.	Standard queries are designated as User queries. Workflow queries are either Process or Role queries. For this example, use the default.
28.	Use the <b>Owner</b> field to specify the access to this query. Private indicates that only the user ID that created the query can open, run, modify, or delete the query. Public indicates that any user with access to the records used by the query can run, modify, or delete the query. For this example, you want to make it a private query.
29.	Click the <b>OK</b> button. <input type="button" value="OK"/>



Step	Action
30.	Finally, view the results of the query. Click the <b>Run</b> tab. <input type="button" value="Run"/>

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The screenshot shows the PeopleSoft Query Manager interface. The left sidebar contains a navigation menu with categories like Recruiting, Workforce Administration, Benefits, Compensation, Stock, Time and Labor, Payroll for North America, Global Payroll & Absence, Mgmt, Payroll Interface, Workforce Development, Organizational Development, Enterprise Learning, Workforce Monitoring, Pension, Campus Community, Student Recruiting, Student Admissions, Records and Enrollment, Curriculum Management, Financial Aid, Student Financials, Academic Advising, Contributor Relations, Set Up HRMS, Set Up SACR, Enterprise Components, Worklist, Application Diagnostics, Tree Manager, Reporting Tools, and Query. The main area displays a table with the following data:

	Count ID	Career	Term
1	7	BAC	2030
2	2	BAC	2040
3	1	BBL	2030
4	2	BBL	2040
5	24	BUSN	0330
6	22	BUSN	0350
7	14	BUSN	0370
8	11	BUSN	0390
9	11	BUSN	0410
10	11	BUSN	0430
11	4	BUSN	0440
12	14	BUSN	0450
13	4	BUSN	0460
14	4	BUSN	0487
15	16	CNED	0332
16	1	CNED	0390
17	1	CNED	0410
18	1	CNED	0430
19	3	CNED	0450
20	2	CRED	0330
21	11	CRED	0430
22	1	CRED	0440
23	2	CRED	0487
24	3	CRED	0518
25	8	CRED	0530
26	7	CRED	0540

Step	Action
31.	The results display a count of total IDs for each career and term combination.
32.	You have successfully applied an aggregate function to a query. <b>End of Procedure.</b>