Student Administration
Query Intermediate 9.0 pt. 8.53

Training Guide
Student Administration

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Creating and Formatting a New Query
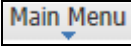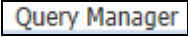
Create a New Query

Procedure

In this topic you will learn how to **Create a New Query**.

NOTE: In this example the query will display the student's name, ID, date of birth, gender, marital status, and highest education level.

Step	Action
1.	Click the **Main Menu** button. Main Menu
2.	Click the **Reporting Tools** menu. Reporting Tools
3.	Click the **Query** menu. Query
4.	Click the **Query Manager** menu. Query Manager
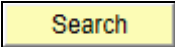
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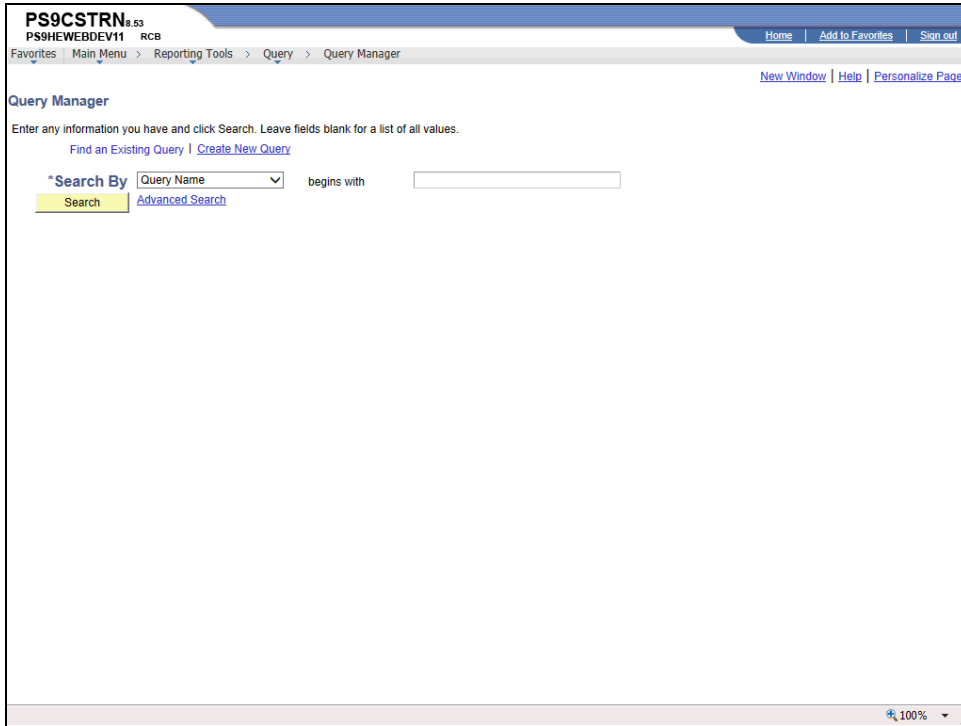| Step	Action
5.	Click the **Create New Query** link. Create New Query
6.	**Adding Records** The Records page is the first page that you will see when you click the Create New Query link on the Search page. You will select the information for your query on the Records page.
7.	The Records page displays the records (tables) available to query in alphabetical order. The list of records available to the end-user is determined by his/her security rights (Operator ID). Information for your query will be pulled from the selected record, and will create the data rows on your spreadsheet. The end-user may view existing records by selecting one of the following methods: 1. Click the Search button to view a list of records; or 2. Enter the appropriate search criteria (record name) into the Search by field. The end-user may enter the full record name or partial information in CAPS or lower case. Use the % (percent sign) to act as a wildcard when searching.
8.	In this example you will use fields from one record -- the ZZ_PER_QRY_SAVW_CLONE record. Enter the desired information into the **Description** field. Enter "**ZZ_PER**".

Step	Action
9.	Click the **Search** button.
10.	Click the **Add Record** link.
11.	**Selecting Fields** The record and the fields in the record appear on the Query page. It is here that you will select fields to build the query by clicking the checkbox in front of the field. *NOTE: You may click the checkbox to deselect a field or click the Uncheck All Fields button to deselect all fields that are checked.*
12.	The Key symbol in front of the field indicates Key fields. Key fields are fields that are common between records.
13.	The **Add Criteria** symbol (funnel with a plus sign) allows you to add criteria from the record itself. Adding criteria will be covered in the Working with Criteria and Prompts section.
14.	The A-Z button allows you to view fields in alphabetical order.

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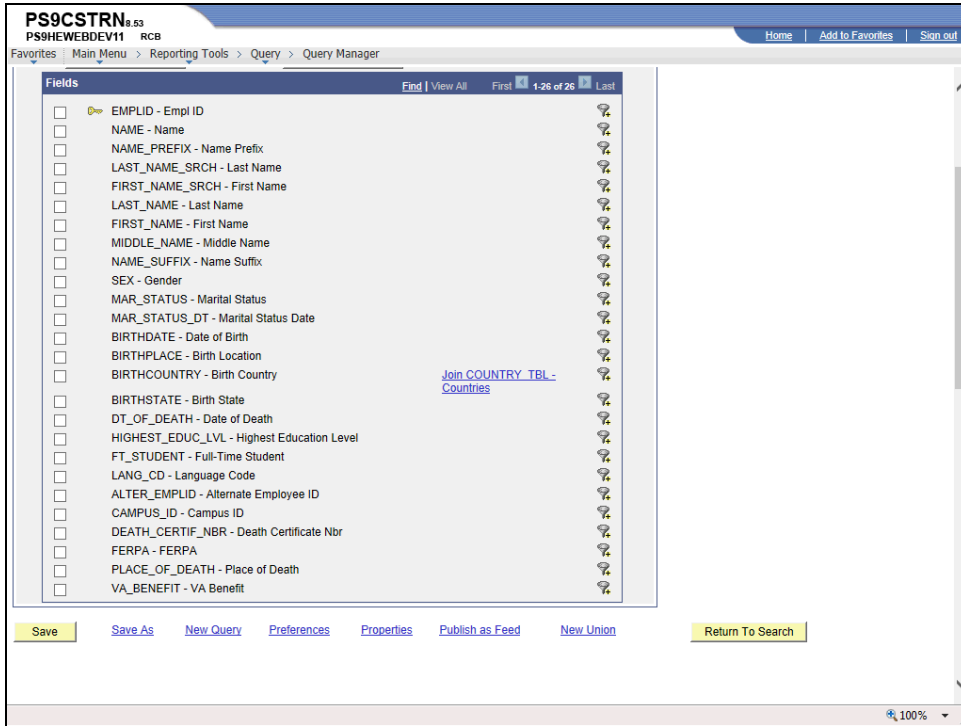
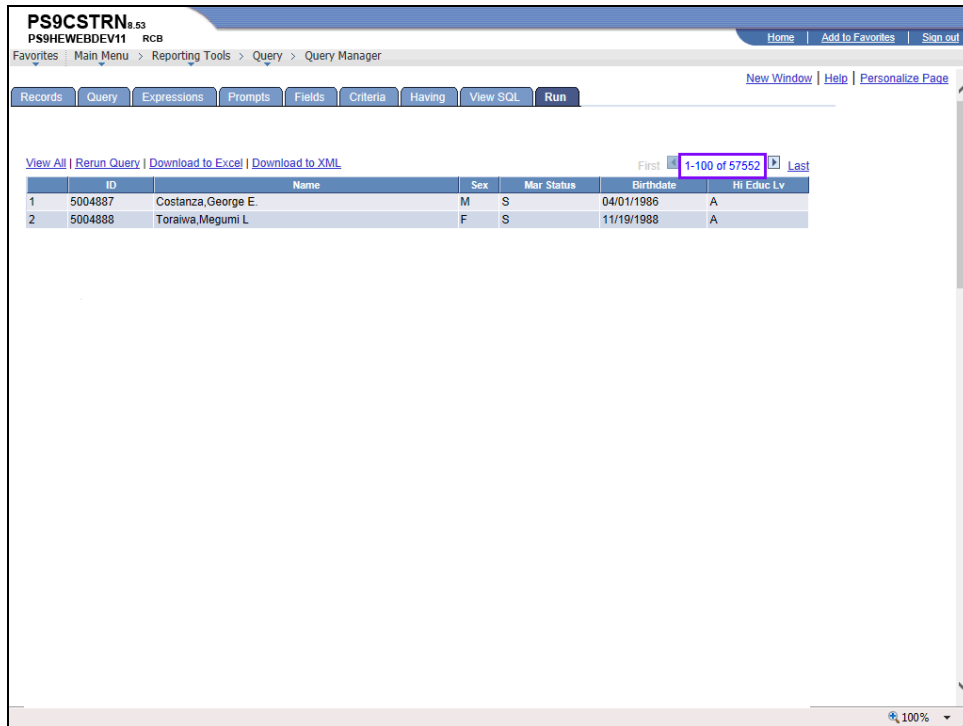| Step	Action
15.	The fields selected will be the columns on your spreadsheet. Click the **EMPLID** option.
16.	Click the **Name** option.
17.	Click the **Gender** option.
18.	Click the **Marital Status** option.
19.	Click the **Birthdate** option.
20.	Click the **Highest Education Level** option.
21.	Click the **Fields** tab.
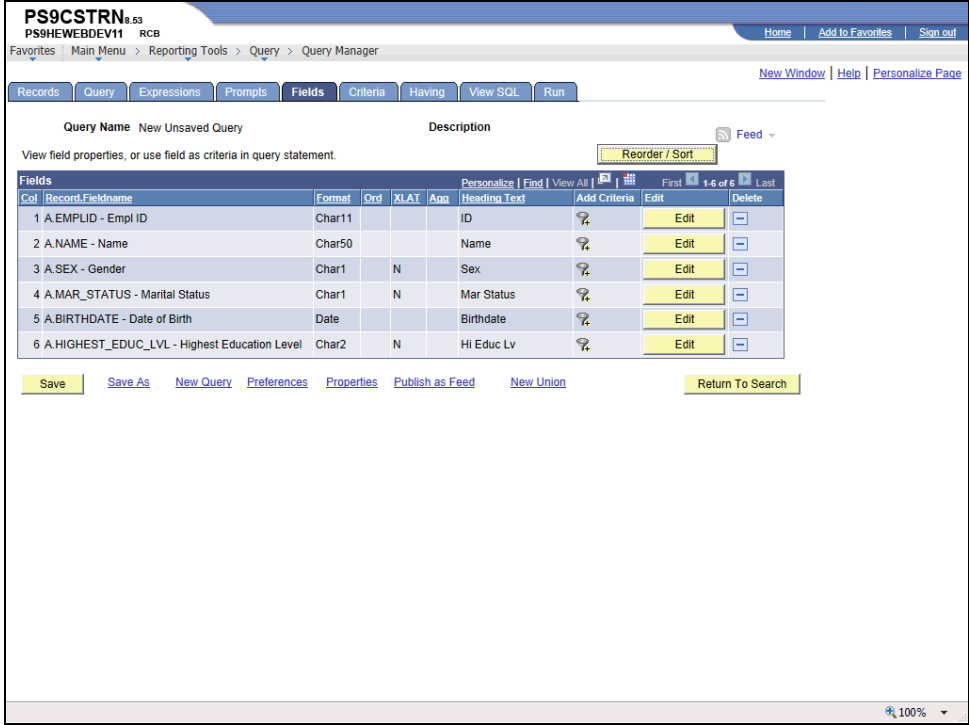
Step	Action
22.	Fields are displayed on the Fields tab in the order in which they were selected on the Query tab. Click the **Run** tab. Run

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Step	Action
23.	A total of 57,552 results display. Click the **Fields** tab.

Step	Action
24.	Click the **Save As** link. Save As

Step	Action
25.	Enter the desired information into the **Query** field. Enter "**STDLIST**".
26.	Enter the desired information into the **Description** field. Enter "**STUDENT LIST**".
27.	Enter the desired information into the **Query Definition** field. Enter "**Current List of Students**".
28.	Click the **OK** button. ⬜ OK
29.	This completes *Create a New Query*. **End of Procedure.**

Format a Query

Procedure

In this topic you will learn how to **Format a Query**.
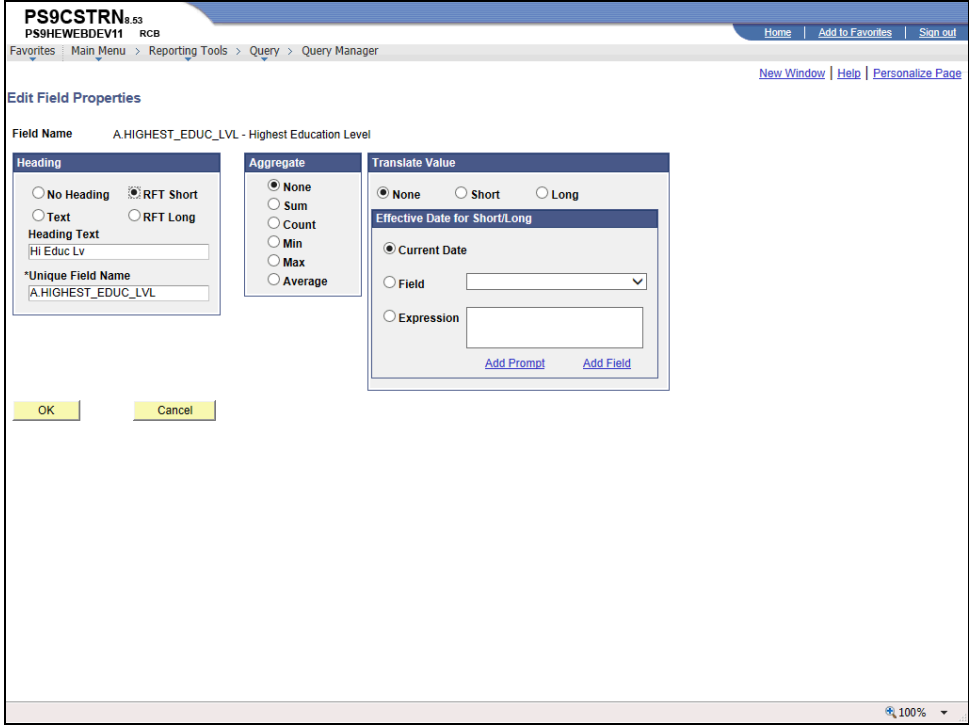
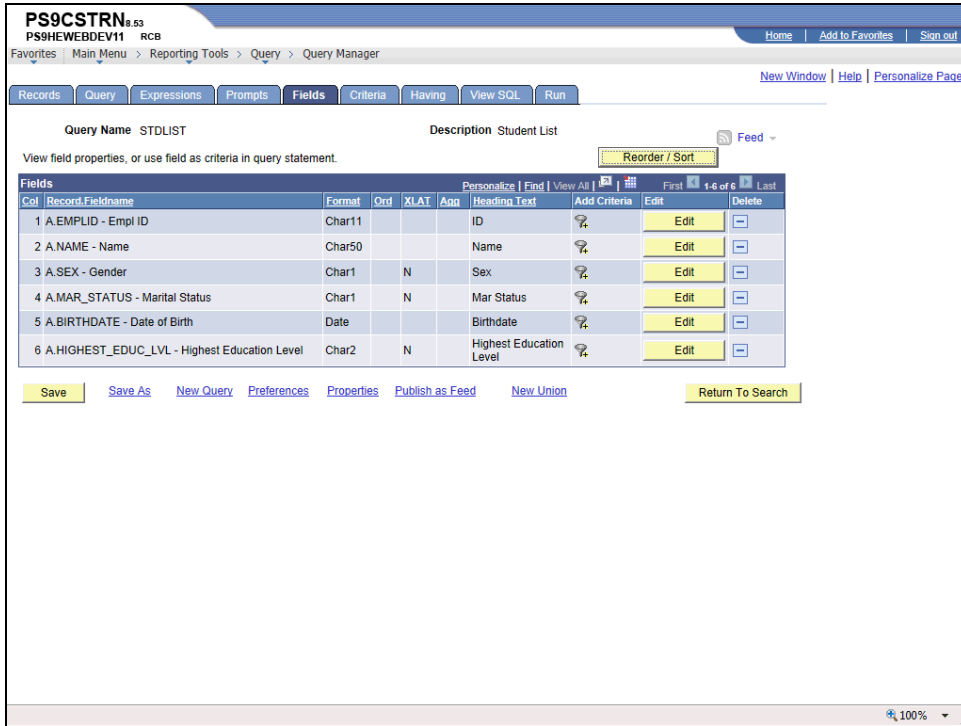| Step	Action
1.	You can make formatting changes for the query on the Fields page. The following are the format options available: · Change the column heading text. · Change the translate (XLAT) code when this option is available for a field · Sort the output results by a particular field. · Change the order of the columns (i.e. the order in which the fields appear in the query results).
2.	In this example the query results will be formatted as follows: 1. Change the heading text to reflect the long description for Highest Education Level. 2. Display the long description of each person's Highest Education Level rather than the default code. 3. Sort the data by Highest Education Level in descending order. 4. Change the order of the Highest Education Level field to display as the first column.

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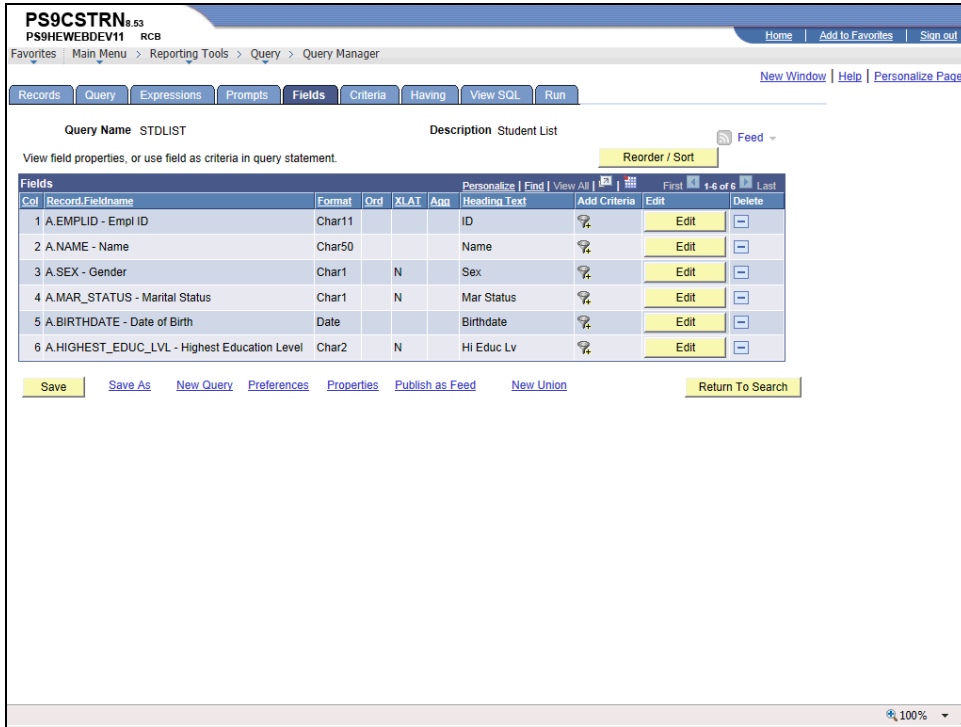
Step	Action
3.	Click the **Edit** button for the **Highest Education Level** field. *NOTE: Fields are formatted one at a time.* [Edit button]
4.	The **Translate Value** box will not appear on this page if a field does not have an associated Translate Value.
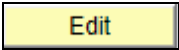
Step	Action
5.	Click the **RFT Long** option.
6.	Click the **OK** button.

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Step	Action
7.	Click the **Edit** button for **Highest Education Level**. Edit
8.	The **Translate Value** box will not appear on this page if a field does not have an associated Translate Value. If a field has an associated Translate Value, the XLT column will contain one of the following three values: · **N** (None) option will display the default translate code (e.g. "G" for a Bachelor's Degree) in the query results. · **S** (Short) option will display a maximum of 10 characters (e.g. Bachelor's) in the query results. · **L** (Long) option will display a maximum of 30 characters (e.g. G-Bachelor's Level Degree) in the query results.
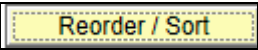
Step	Action
9.	Click the **Long** option.
10.	Click the **OK** button.

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| Step	Action
11.	Click the **Reorder / Sort** button. Reorder / Sort
12.	The **Edit Field Ordering** page allows you to view and change the Sort Order and Output Order of the fields in a single page. In this example, the query results will be changed as follows: · The query results will be sorted by **Highest Education Level**. · The fields (columns) will appear in the following order: **ID**, **Name**, **Birthdate**, **Gender**, **Marital Status**, and **Highest Education Level**.

Step	Action
13.	Click the **Descending** option for Highest Education Level.
	This option allows the results to sort the Highest Education Level first.
14.	Enter the desired information into the **New Order By** field. Enter "**1**".
15.	Enter the desired information into the **New Column** field. Enter "**3**".
	This field will now be the third column displayed in the query results.
16.	Enter the desired information into the **New Column** field. Enter "**4**".
	This field will now be the fourth column displayed in the query results.
17.	Enter the desired information into the **New Column** field. Enter "**5**".
18.	Click the **OK** button.

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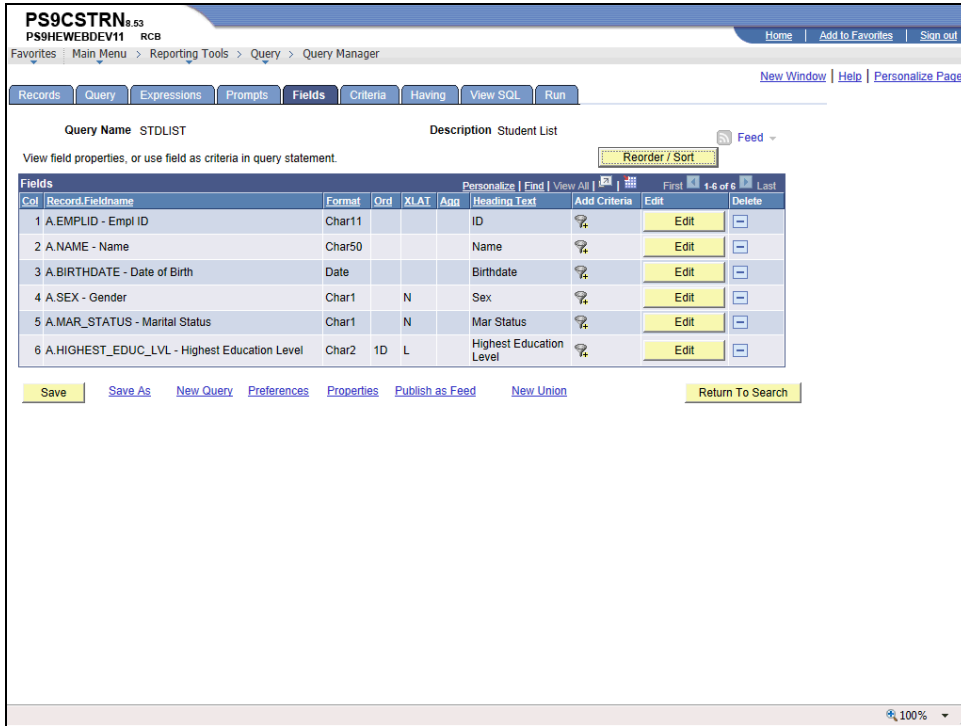
Step	Action
19.	Click the **Run** tab.

Step	Action
20.	Click the **Fields** tab. Fields
21.	**Using the Distinct Option** When running a query, occasionally the same row of output may be listed more than once when it meets multiple query requirements. Using the Distinct option removes duplicate rows of data. However, the end-user should note that this option may remove pertinent duplicate information, depending on the query. Therefore, if the end-user is not sure if any pertinent data will be removed by selecting this option, the safer alternative would be to run the query results to Excel and manipulate the data in the spreadsheet. If the end-user is confident that pertinent data will not be removed, the **Distinct** option is located in the **Properties** page.

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Step	Action
22.	Click the **Properties** link. Properties

Step	Action
23.	Click the **Distinct** option. *NOTE: When you run the query again, any duplicate rows will be deleted.*
24.	Click the **OK** button.
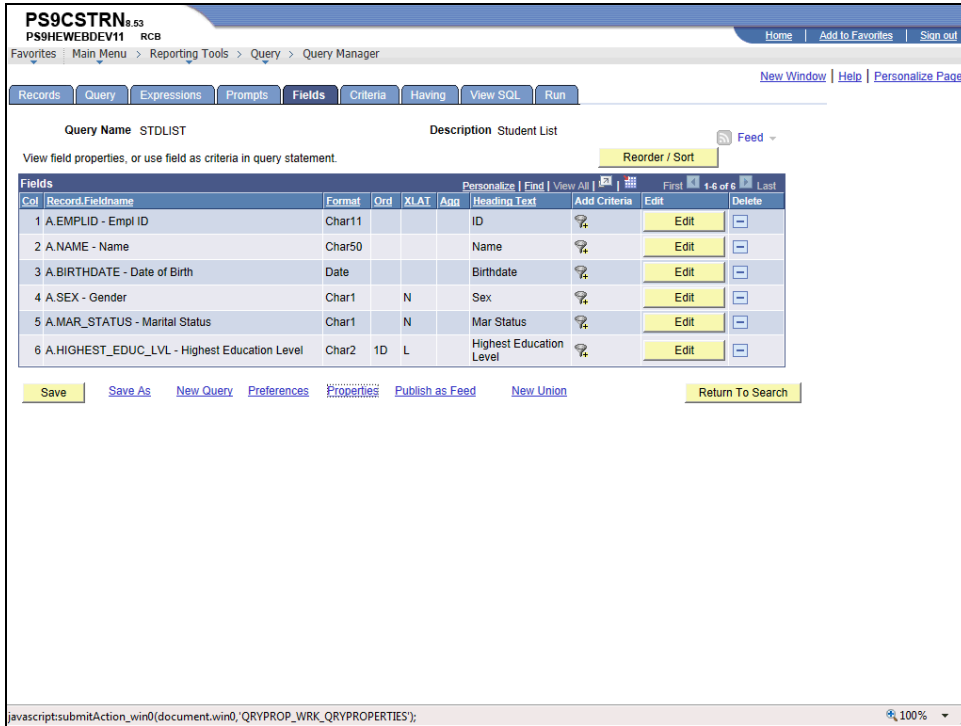
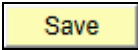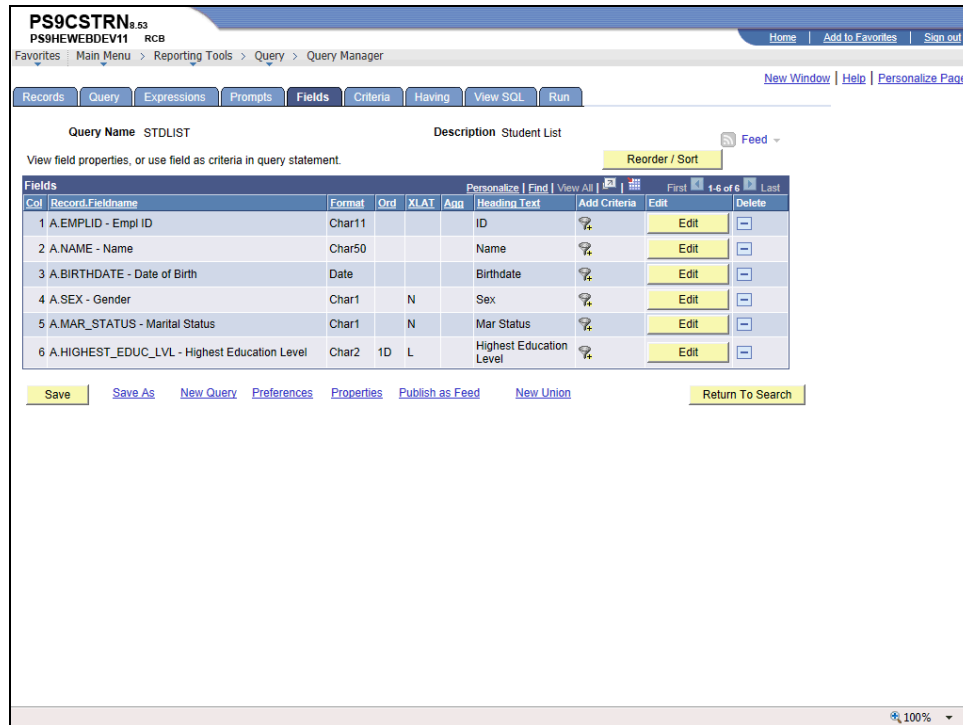| Step	Action
25.	Click the **Save** button.
26.	This completes *Format a Query*. **End of Procedure.**

Working with Criteria and Prompts

Add a Single Criteria

When you build a query you may wish to add certain criteria to limit the query results to a particular condition (e.g. a specific value, a list of values or between two specified values). Although, there are several conditions which you may select, the three most used Condition Types will be covered in Query Intermediate (i.e. equal to, in list and between).

Procedure

In this topic you learn how to **Add a Single Criteria** to the query.

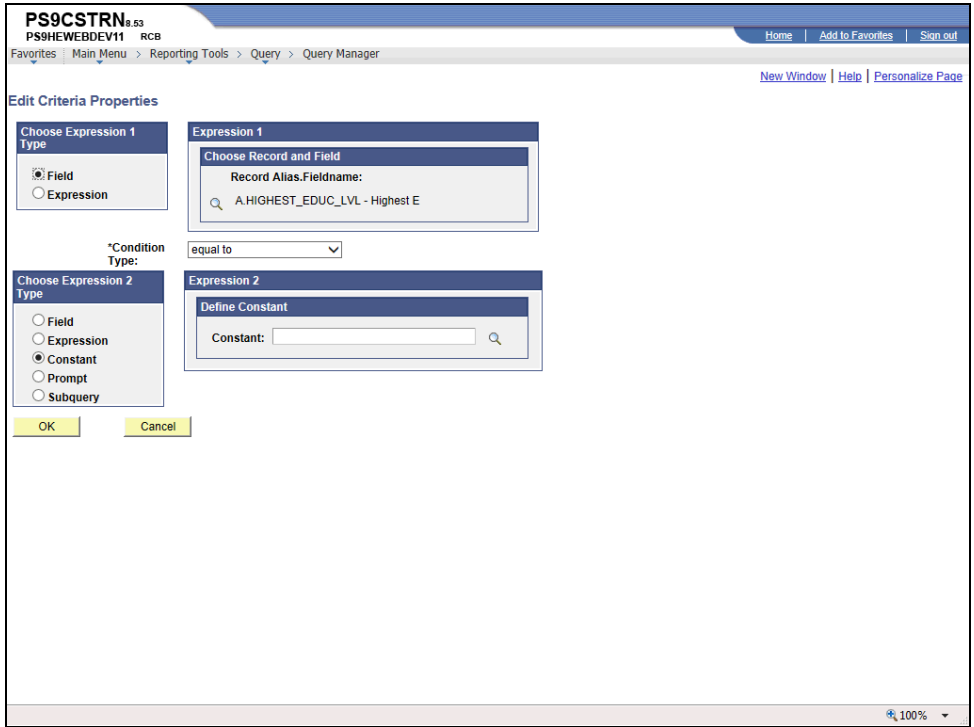| Step	Action
1.	Adding criteria allows you to limit the query results to a specified value.
	In this example the query will display the employees whose highest education level is **Doctorate** (Academic). To do this you will use the "**equal to**" Condition Type.

Step	Action
2.	Click the **Add Criteria** button for HIGHEST_EDUC_LVL.

Step	Action
3.	The system defaults to the equal to Condition Type, so it does not need to be selected from the drop-down list.

Step	Action
4.	Click the **Select Constant From List** button to access the list of education level types and define the desired constant.

Step	Action
5.	Click the **Select Constant** link for "**J**" Doctorate (Academic).
	Select Constant

Step	Action
6.	Click the **OK** button.

Step	Action
7.	Click the **Criteria** tab.
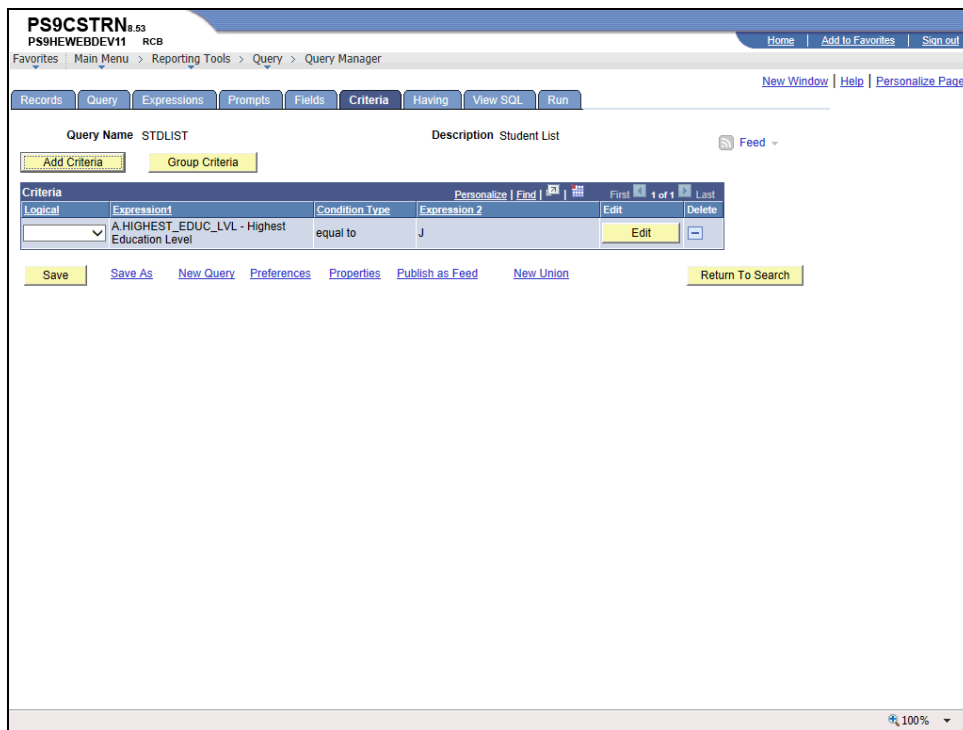
Step	Action
8.	The Criteria tab now indicates to display only those students whose Highest Education Level is equal to 'J'. Click the **Run** tab. [Run]
9.	Your query results have been reduced from 57,552 to 120.
10.	This completes *Add a Single Criteria*. **End of Procedure.**

Add a Group of Criteria Using In List

Procedure

In this topic you learn how to **Add a Group of Criteria Using In List**.

Step	Action
1.	A group of criteria can be added to the query in order to limit the query results to a list of specified values.

In this example the query will display the students whose highest education levels are **Bachelor's Degree**, **Doctorate**, and **Master Level Degree**. To do this you will use the "**in list**" Condition Type. |

Step	Action
2.	Click the **Edit** button.

 |

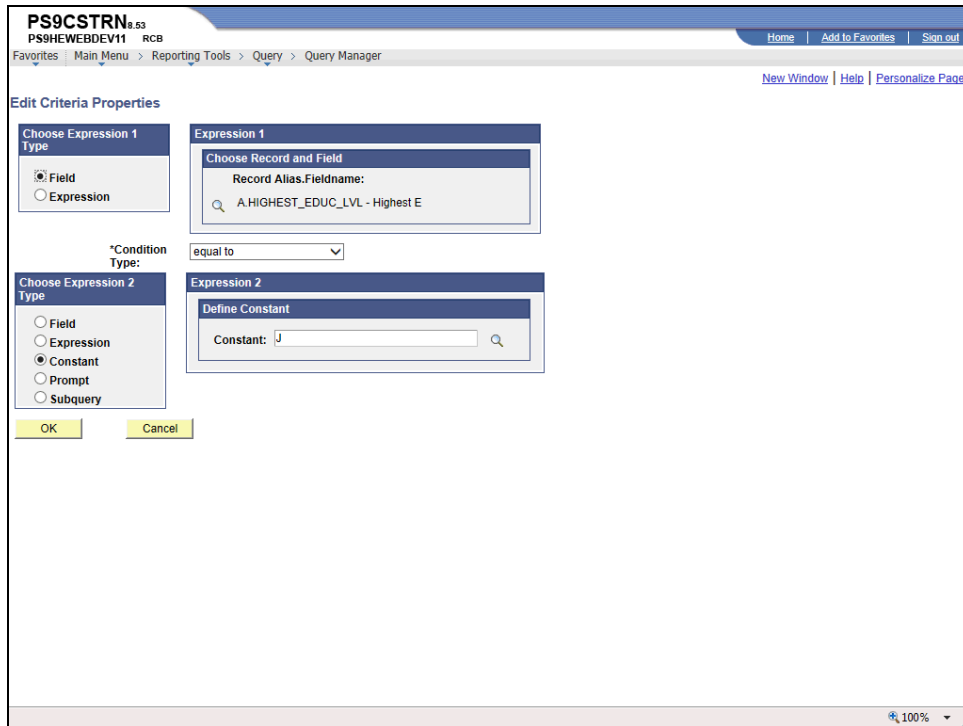| Step	Action
3.	Click the drop-down arrow for ***Condition Type** and select the **in lis**t option. *NOTE: The "in list" Condition Type finds data having a value that matches any one of the values in a specified list of values.*
4.	Click the **in list** list item. in list
5.	Click the **Select List Members** button.
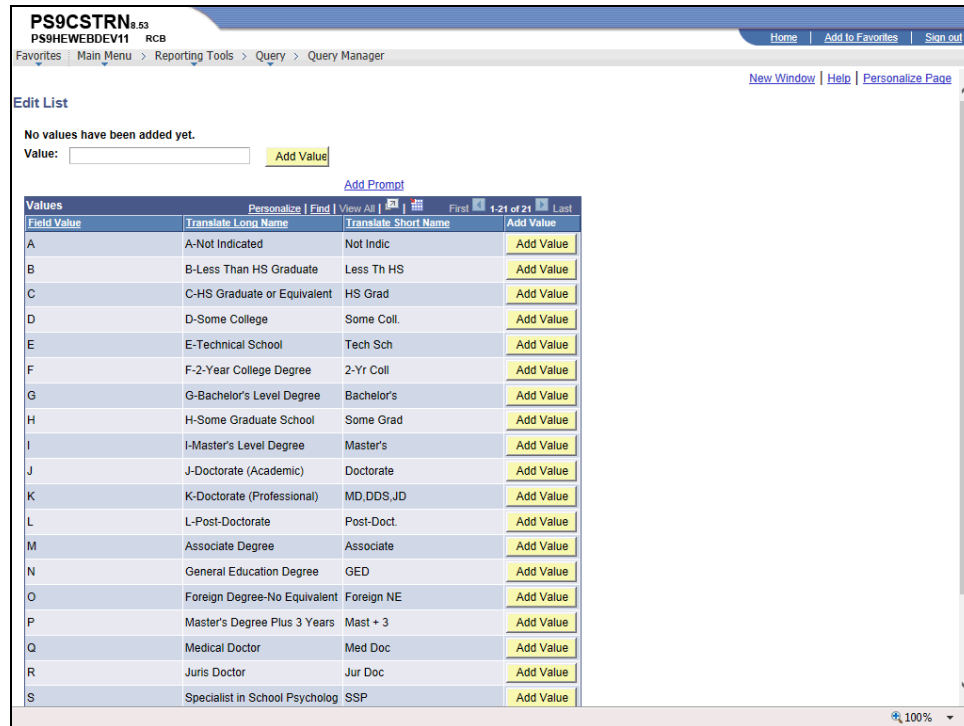
Step	Action
6.	Click the **Add Value** button for **G-Bachelor's Level Degree**. [Add Value]
7.	Click the **Add Value** button for **I - Master's Level Degree**. *NOTE: To delete a value, check the box that appears in front of the value that you wish to delete under List Members and click the Delete Checked Values button.* [Add Value]
8.	Click the **Add Value** button **J-Doctorate**. [Add Value]
9.	Click the **OK** button. [OK]
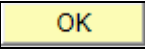
Step	Action
10.	Click the **OK** button.

Step	Action
11.	The Criteria tab now indicates to only display those students whose HIGHEST_EDUC_LVL is G, I, or J. Click the **Run** tab. Run
12.	Your query results increased from 120 to 3,665.
13.	This completes *Add a Group of Criteria Using In Lis*t. **End of Procedure.**

Add Criteria using Between

Procedure

In this topic you learn how to **Add Criteria using Between**.

Step	Action
1.	The "**between**" criteria allows you to limit the query results to data that falls between two specified values. In this example the query will display the students whose date of birth is between January 1, 1982 and January 1, 1991. To do this you will use the "**between**" Condition Type.
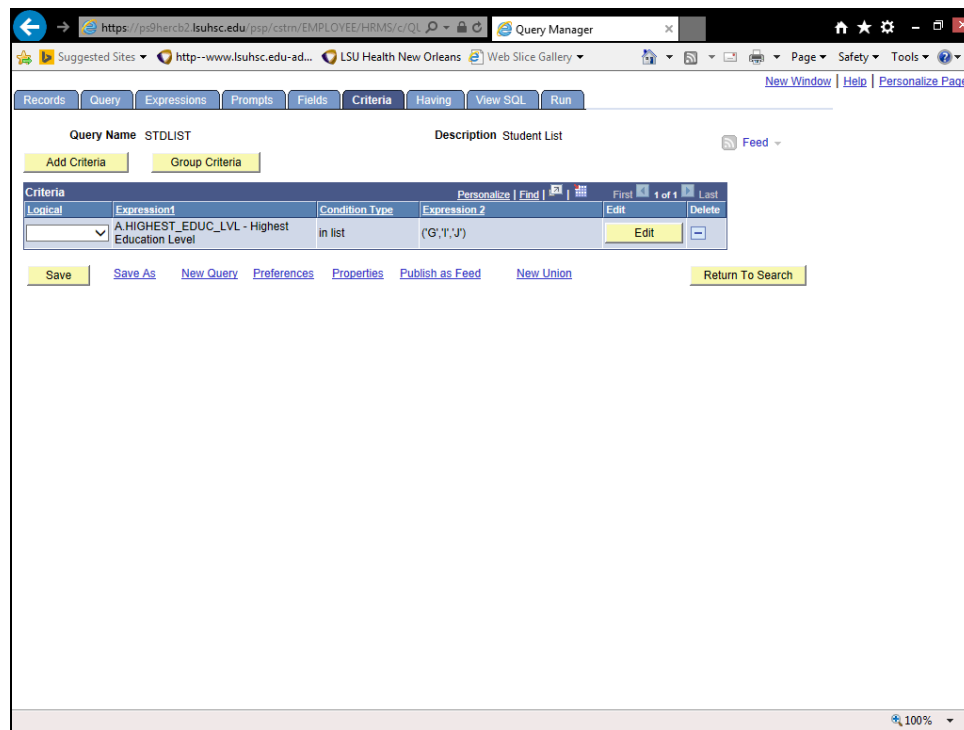
Step	Action
2.	Click the **Fields** tab. Fields

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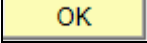
Step	Action
3.	Click the **Add Criteria** button.
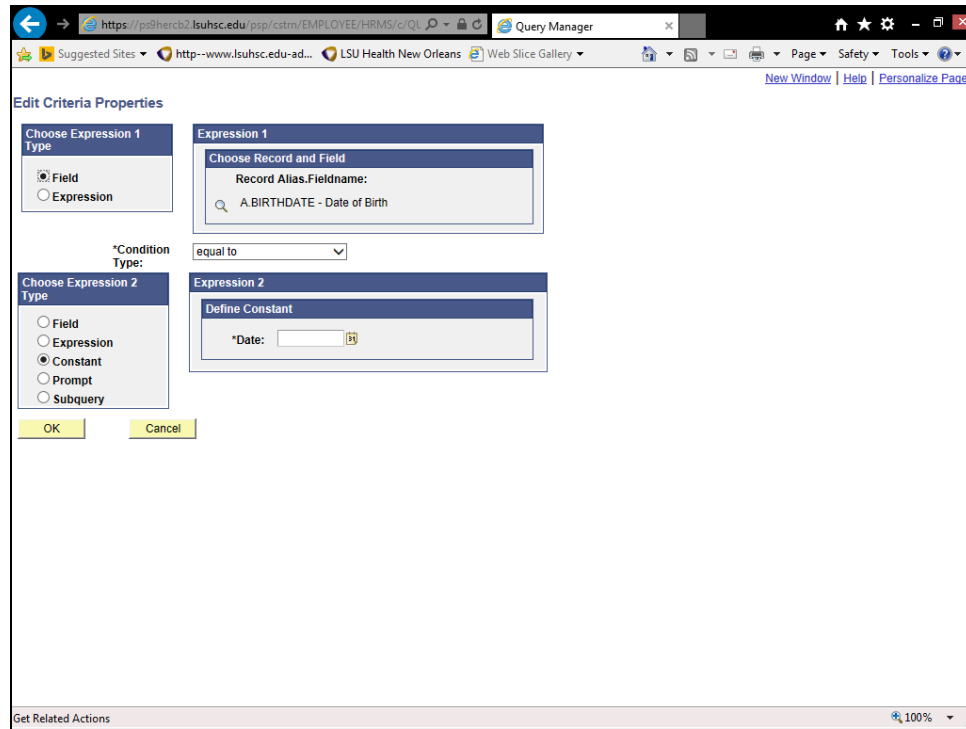
Step	Action
4.	Click the drop-down for ***Condition Type** and select the **between** option.
5.	Click the **between** list item.
6.	Enter the desired information into the **Date** field. Enter "**010182**".
7.	Enter the desired information into the **Date 2** field. Enter "**010191**".
8.	Click the **OK** button.

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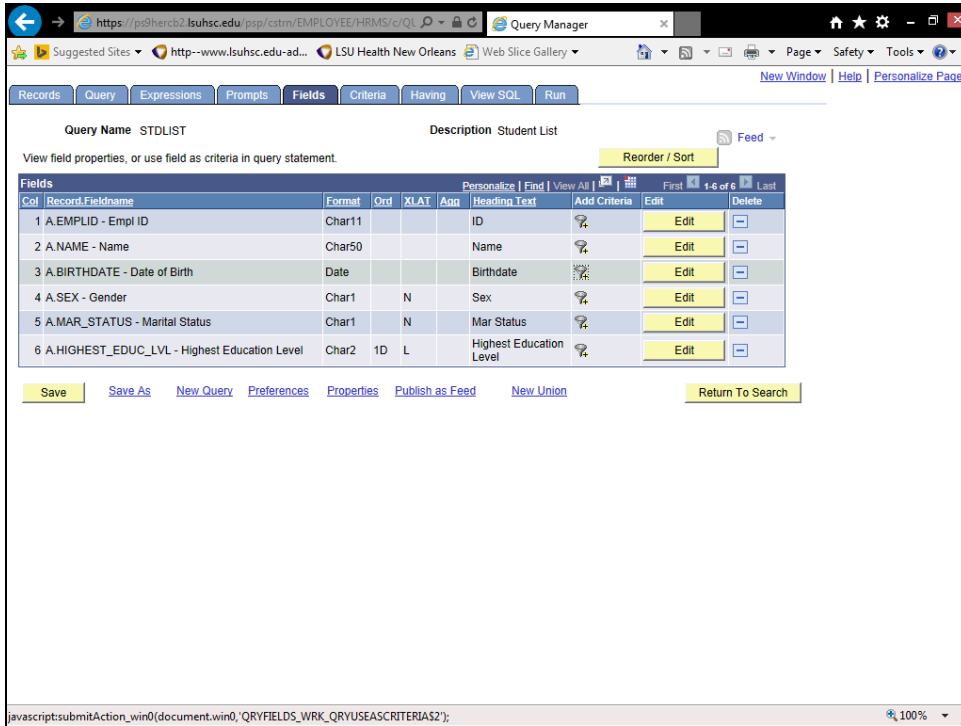
Step	Action
9.	Click the **Criteria** tab. **Criteria**
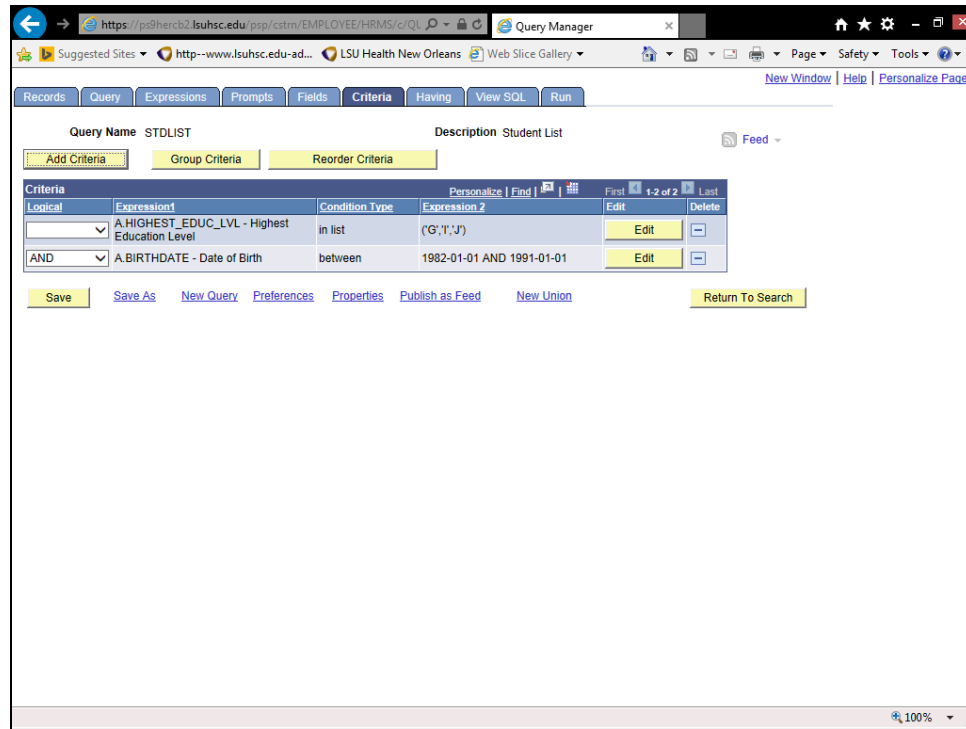
Step	Action
10.	The Criteria tab now shows to display only students whose Highest Education Level is equal to G, I or J, and whose date of birth is between 01/01/1982 and 01/01/1991. Click the **Run** tab. ![Run]
11.	Your query results have now decreased from 3,665 to 170.
12.	This completes *Adding Criteria using Between*. **End of Procedure.**

Add a Prompt

Procedure

In this topic you learn how to **Add a Prompt**.

Step	Action
1.	Prompts allow you to select a desired value each time the query is run. In this example, when you run the query you will be prompted to select the desired highest education level. To do this you will use the "**equal to**" Condition Type and create a "**prompt**" expression.

Step	Action
2.	Click the **Edit** button for **HIGHEST_EDUC_LVL**.
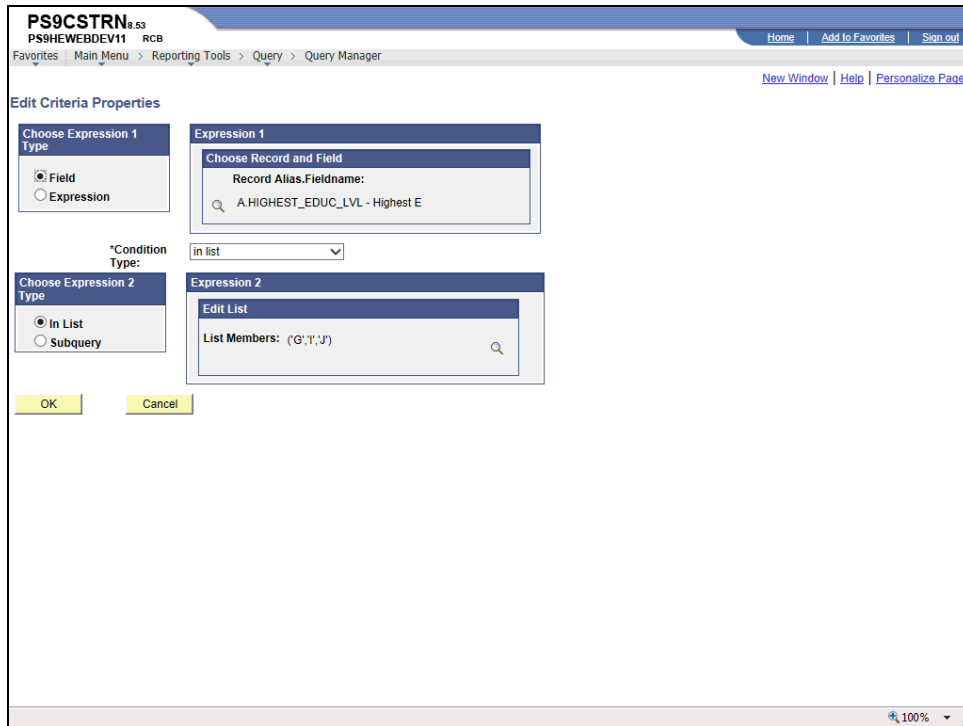
Step	Action
3.	Click the **Condition Type** list. *NOTE: In order to use a prompt, the Condition Type should be set to "Equal to".* ⌄
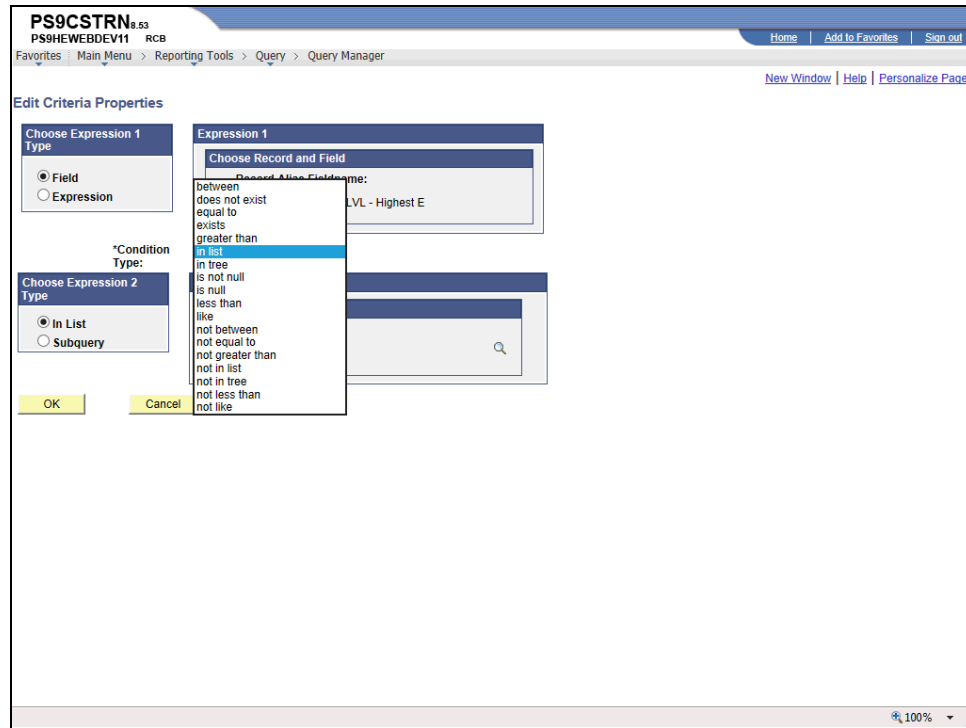
Step	Action
4.	Click the **equal to** list item.
	equal to
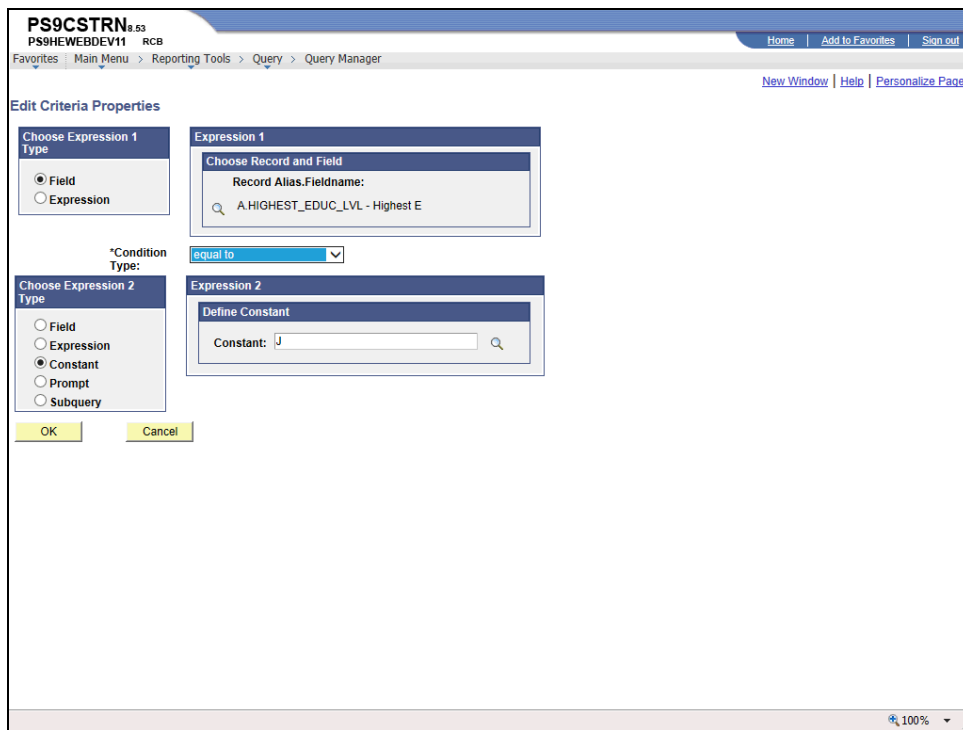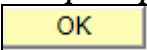
Step	Action
5.	Click the **Prompt** option.
6.	Click the **New Prompt** link.

Step	Action
7.	Click the **OK** button. *NOTE: Most users will not make changes to the default values on this Edit Prompt Properties page.* OK

Step	Action
8.	Click the **OK** button.
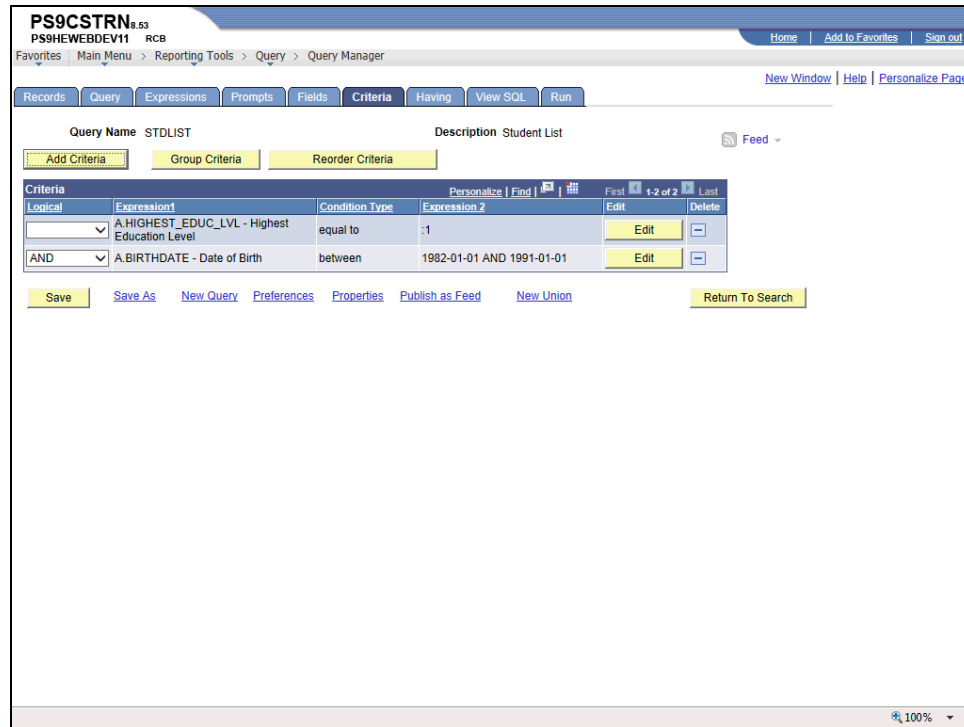
Step	Action
9.	The Criteria tab now indicates that HIGHEST_EDUC_LVL has a prompt (:1), and Birthdate must be between 01/01/1982 and 01/01/1991. *NOTE: Additional prompts will be denoted as :2, :3, etc.* Click the **Run** tab.
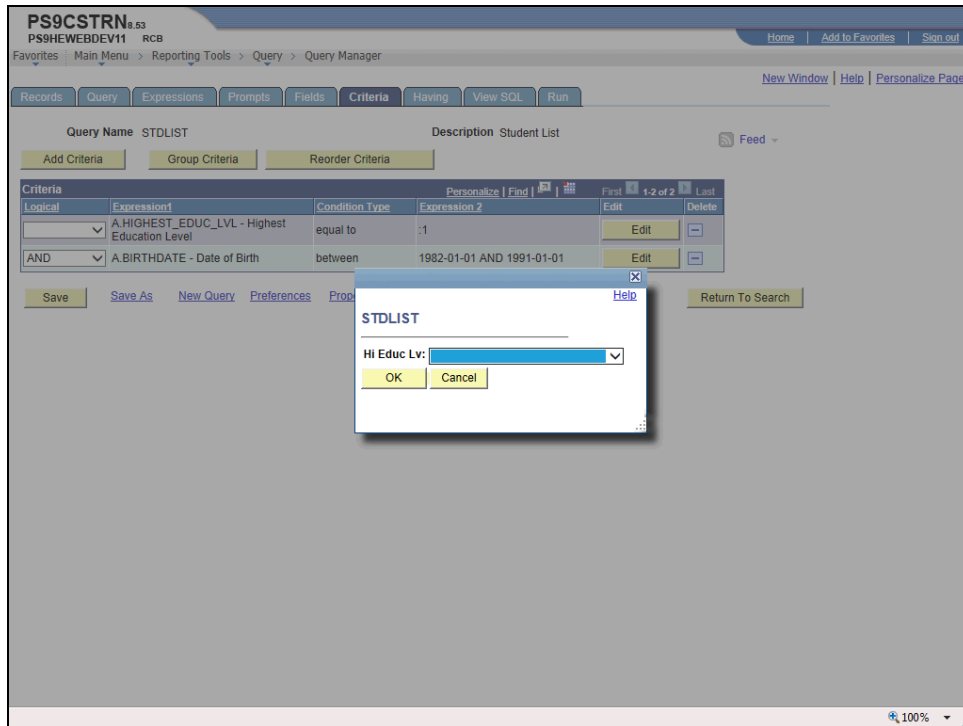
Step	Action
10.	You are prompted to select the desired highest education level.
	Click the button to the right of the **Hi Educ Lv** field.
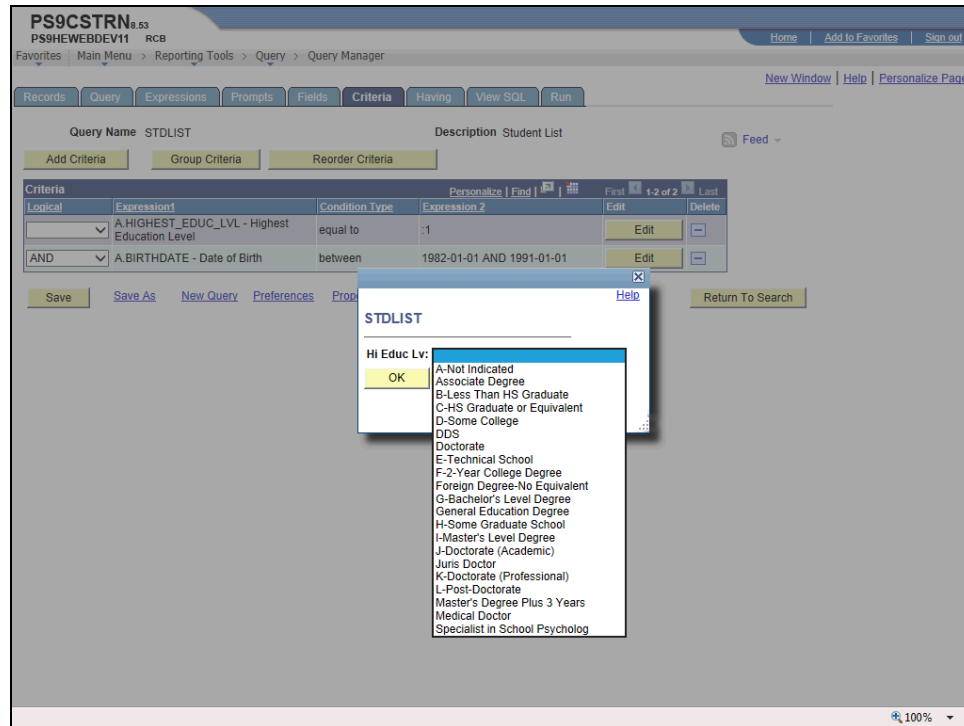
Step	Action
11.	Click the **G-Bachelor's Level Degree** list item. G-Bachelor's Level Degree

Step	Action
12.	Click the **OK** button.
13.	The query results display those employees whose highest education level is Bachelor Level Degree, and whose date of birth is between 01/01/1982 and 01/01/1991. *NOTE: You Save your changes before selecting another link from the menu (e.g. Reporting Tools) by clicking the Save or Save As button. <u>There is no Warning that changes will be lost.</u>*
14.	This completes *Add a Prompt*. **End of Procedure.**

Using Multiple Tables in a Query

When creating a query, it may be necessary to retrieve data from more than one table (record) or specify criteria in your query from a second table. In these cases, you need to link at least two tables in one query. Query enables you to run a query that pulls information from multiple tables. When you perform a join, the records involved are linked based on common fields.

Linking multiple tables, or joining, enables Query to retrieve data from more than one table, but the query output will appear as if the data is retrieved from a single table. Working with multiple tables is almost as easy as working with one.

The two joins that are covered in Query Intermediate are the following:
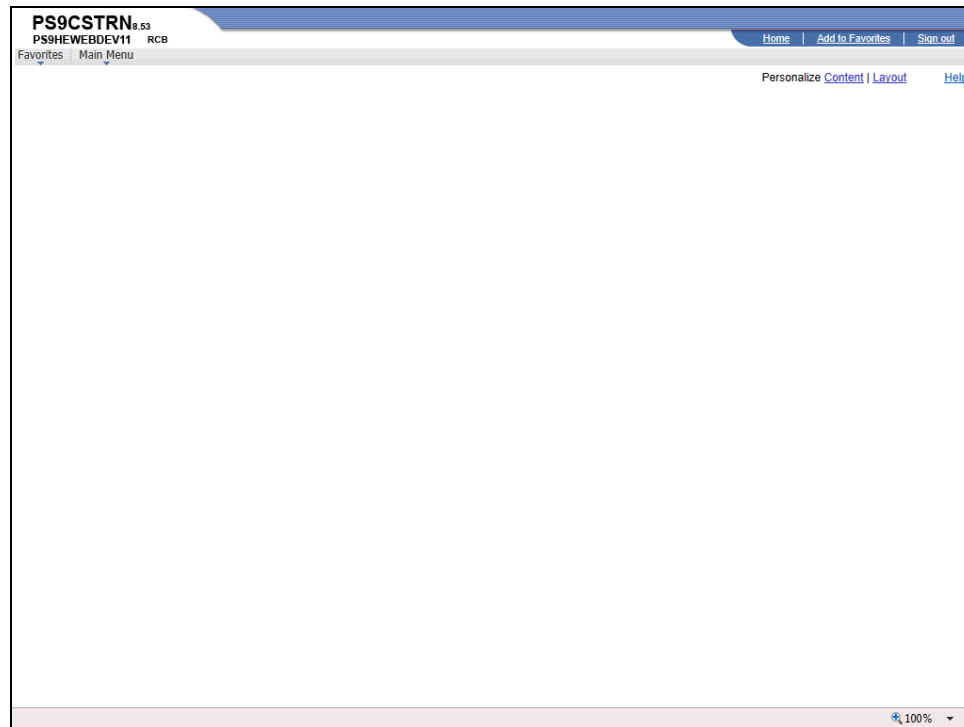1. Related Record join
2. Any join

In this lesson you wish to retrieve a query that provides a list of student with their **Student ID, Name, Birthdate, Birth Country, Country Description, Academic Program, Degree, Expected Grad Term** . The **ZZ_PER_QRY_SAVW - Clone of PER_QRY_SAVW** record contains the **Student ID, Name, Birthdate, and Birth Country** fields. The **ZZ_STD_PROG_VW** record contains the **Academic Program, Degree, and Expected Grad Term fields,** but not the **Descr field**. The **Descr** field is found in the **COUNTRY_TBL** table. Therefore, it will be necessary to pull the fields from three different tables (**ZZ_PER_QRY_SAVW, ZZ_STD_PROG_VW** and **COUNTRY_TBL**) to retrieve the desired query results.
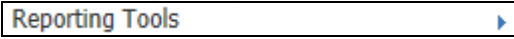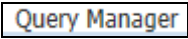
Use Any Joins and Related Record Joins

Procedure

In this topic you will learn how to **Use Any Joins and Related Record Joins**.

Step	Action
1.	Click the **Main Menu** button.
	Main Menu
2.	Click the **Reporting Tools** menu.
	Reporting Tools ▶
3.	Click the **Query** menu.
	Query ▶
4.	Click the **Query Manager** menu.
	Query Manager

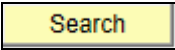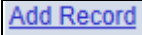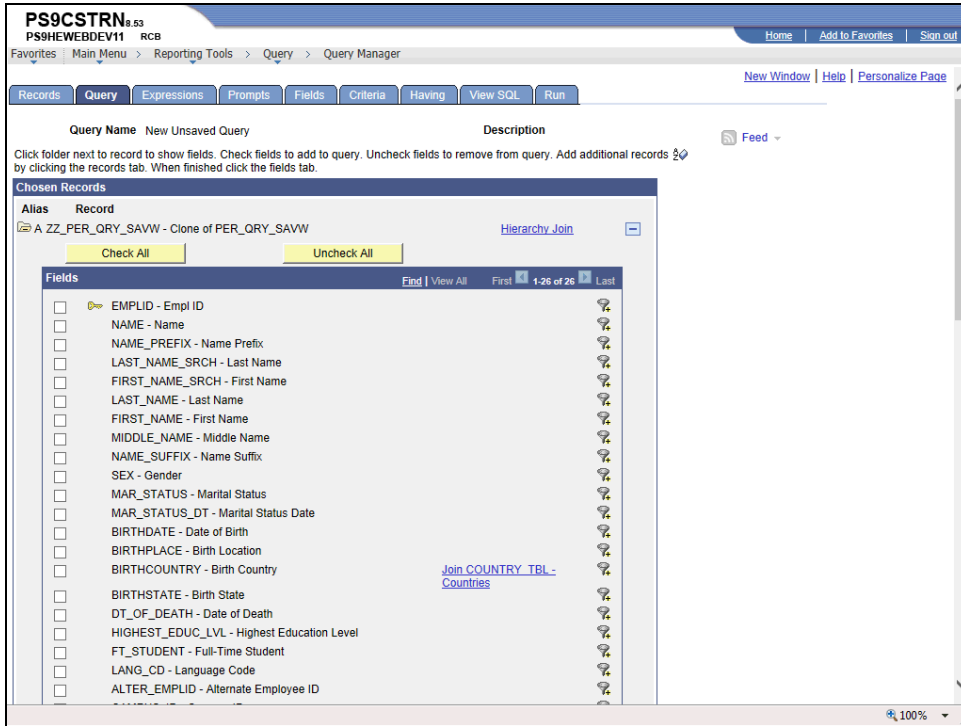| Step	Action
5.	Click the **Create New Query** link. ![Create New Query]
6.	Joins allow you to create a query that combines fields from three tables/records (**ZZ_PER_QRY_SAVW**, **ZZ_STD_PROG_VW and COUNTRY_TBL**) using a **Related Record** join. In Query, predefined joins can be generated as a Related Record join. Since these types of joins are predefined, you will not have to add any criteria to manually link the records. **Any Joins** gives you the ability to join any record that you may access, to your currently selected record. Records will be joined on their common high-level keys. If you have an **Any Join**, it will automatically be added to your criteria, unless there is only one row of data in the record to be joined.
7.	Enter the desired information into the **Description** field. Enter "**ZZ_PER**".

Step	Action
8.	Click the **Search** button. Search
9.	Click the **Add Record** link. Add Record
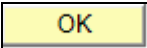
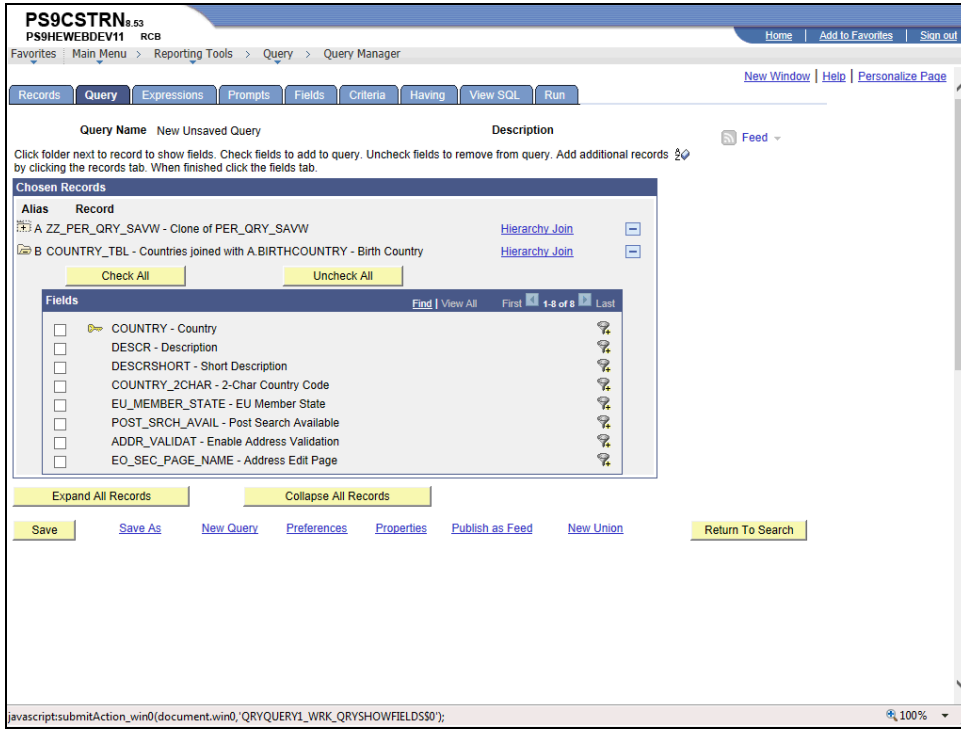| Step	Action
10.	Click the **EMPLID** option.
11.	Click the **Name** option.
12.	Click the **Birthdate** option.
13.	Click the **Birth Country** option.
14.	Click the **Join COUNTRY_TBL - Countries** link. *NOTE: This is a Related Record join.* Join COUNTRY_TBL - Countries
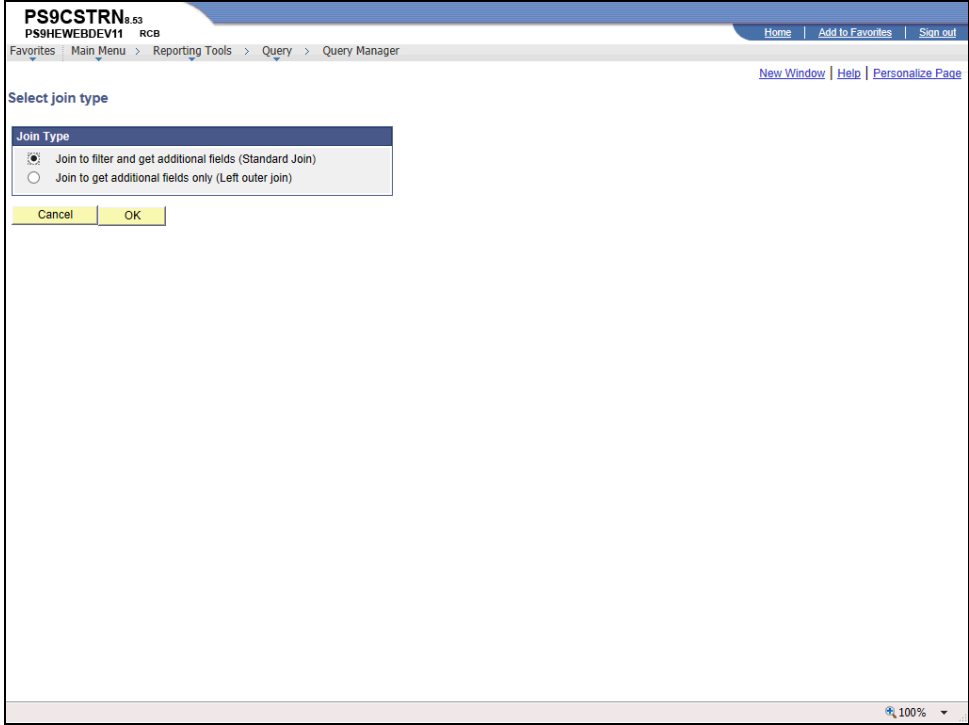
Step	Action
15.	Click the **OK** button.

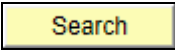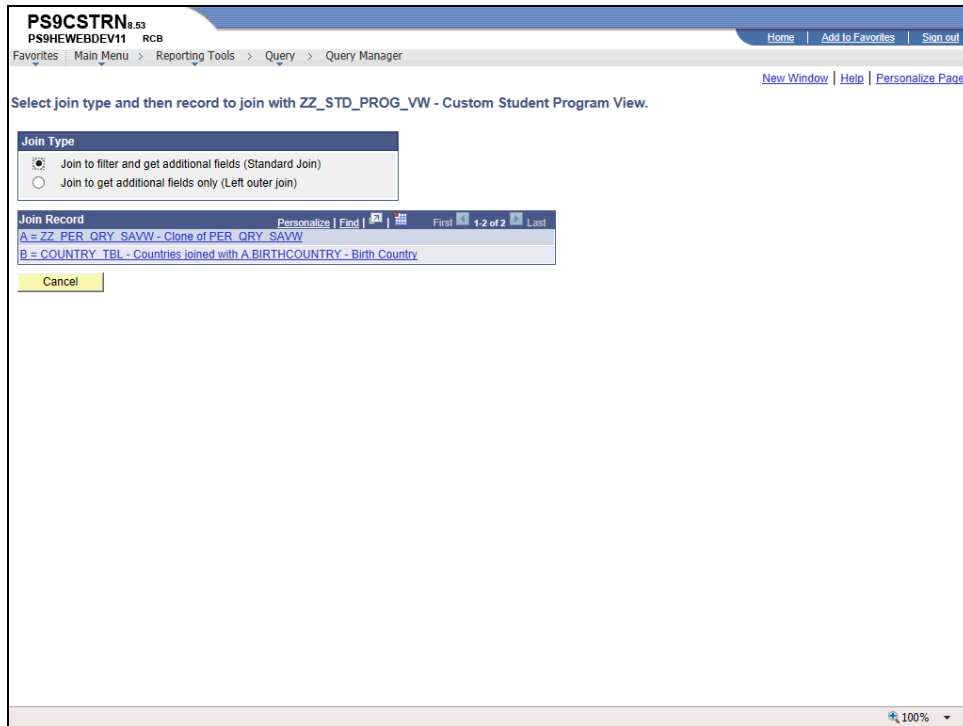| Step	Action
16.	Click the **Description** option.
17.	Click the **Records** tab. *NOTE: This is an Any join.*
18.	Enter the desired information into the **Description** field. Enter "**ZZ_STD**".
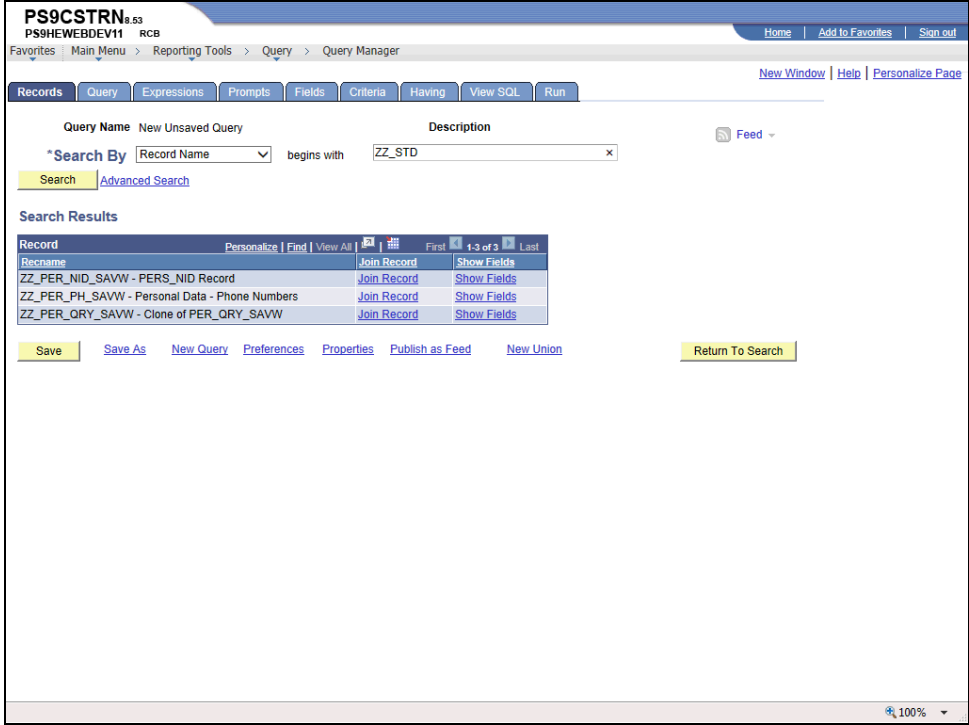
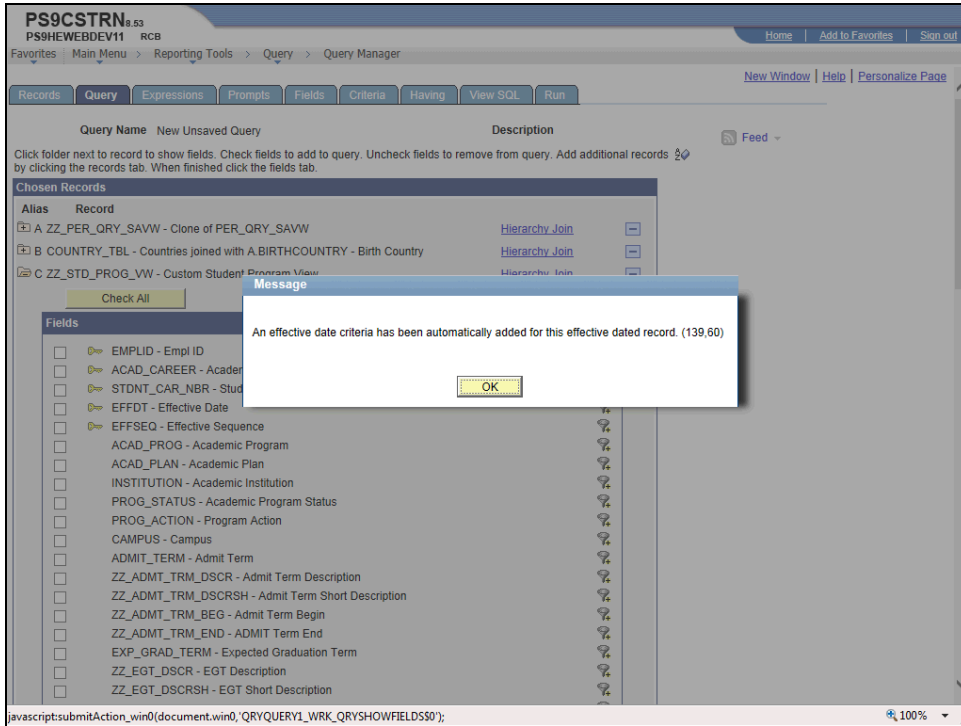| Step	Action
19.	Click the **Search** button.
	![Search]
20.	Click **Join Record** for the ZZ_STD_PROG_VW.
	![Join Record]
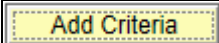
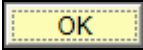| Step	Action
21.	Click the **A = ZZ_PER_QRY_SAVW - Clone of PER_QRY_SAVW** link. A = ZZ_PER_QRY_SAVW - Clone of PER_QRY_SAVW
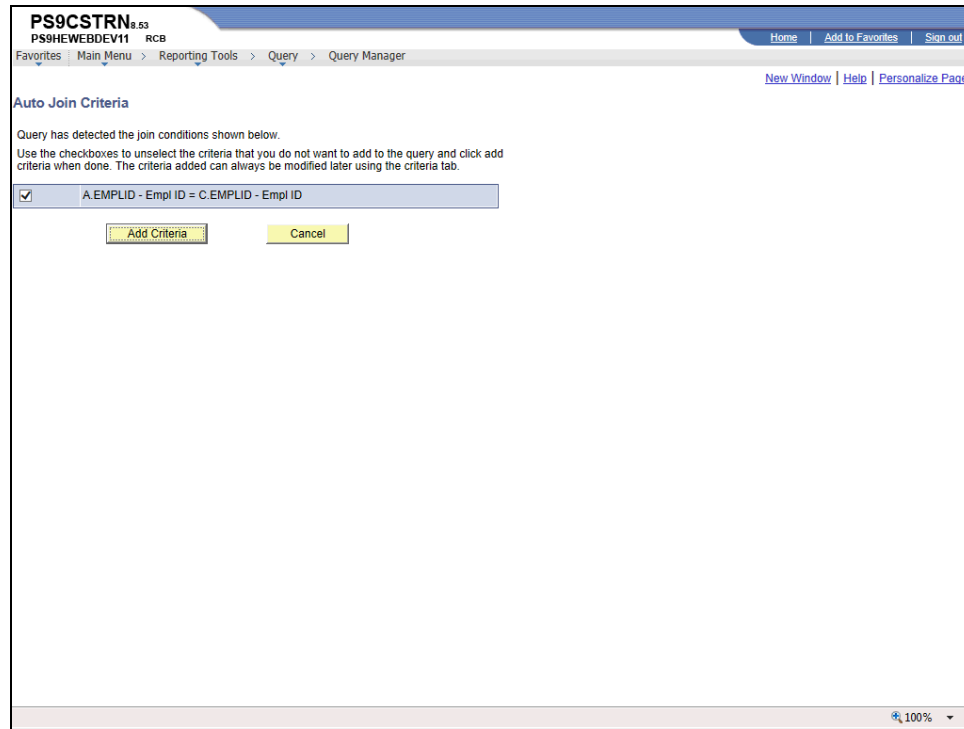
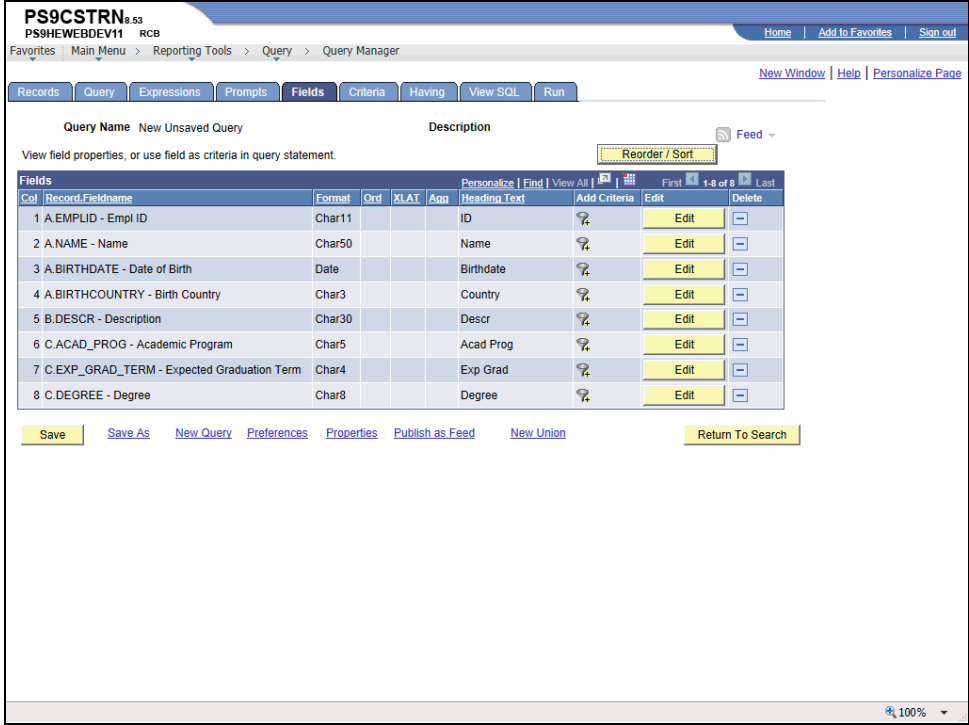| Step	Action
22.	*NOTE: The Query tool has detected alike fields in both queries. <u>Always select Add Criteria on this screen.</u>* Click the **Add Criteria** button.

Step	Action
23.	Click the **OK** button. OK
24.	Click the **Academic Program** option.
25.	Click the **Degree** option.
26.	Click the **Expected Graduation Term** option.
27.	Click the **Fields** tab. Fields
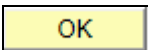
Step	Action
28.	Click the **Save As** link. Save As
29.	Enter the desired information into the **Query** field. Enter "**STUDENT_LIST**".

Step	Action
30.	Enter the desired information into the **Description** field. Enter "**Birth Date and Birth Country**".
31.	Click the **OK** button.
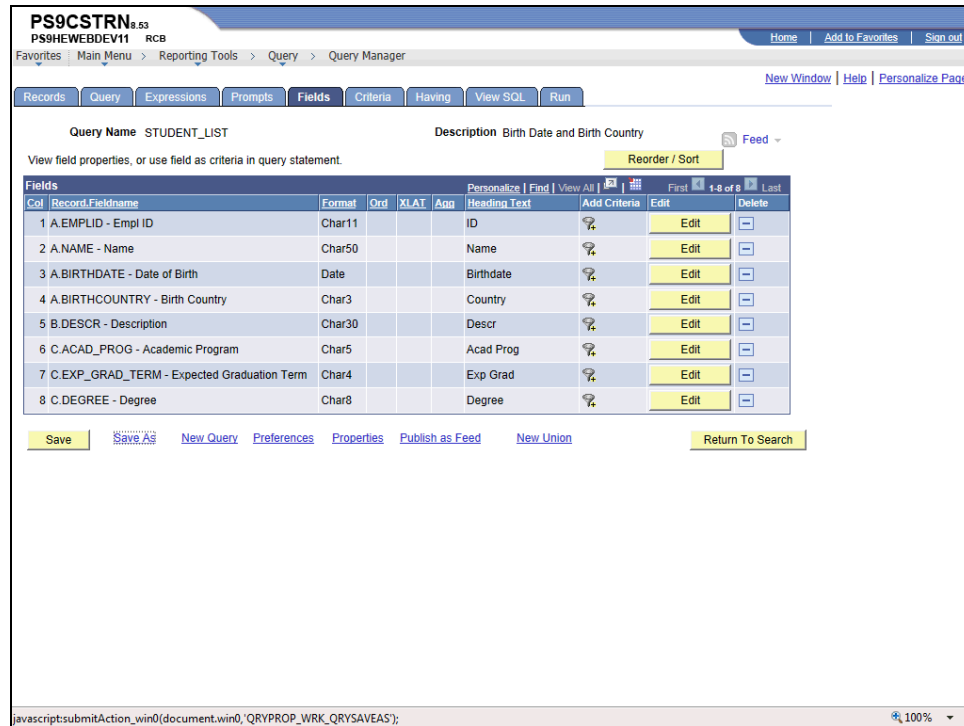
Step	Action
32.	Click the **Run** tab. Run
33.	You query results display.
34.	This completes *Using Any Joins and Related Record Joins*. **End of Procedure.**