HCM Query Intermediate - Fluid

Table of Contents

HCM Query Intermediate - Fluid

Welcome to **PeopleSoft Query Intermediate - Fluid for Human Capital Management (HCM)** module contains information and tools needed to create queries in PeopleSoft 9.2 PT. 8.61.05.

What is Query?

Query is an end-user reporting tool that allows for retrieval of select data from the HCM system. It is accessed through the Reports database and extracts data from PeopleSoft tables and records.

At the end of this module, you will be able to...

1. Create and Format a Query.
2. Add Criteria to a query.
3. Add a prompt to a query.
4. Use Multiple tables to create a query.

Creating and Formatting a New Query

Create a New Query

Procedure

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

Step	Action
1.	**What is a Query?** A Query is a request for data or information from a database. It allows the end-user to interact with the system to retrieve, manipulate, and/or analyze data. The system stores data in tables when it is entered. *Tables* are comprised of *Records (rows)* and *Fields (columns)*. The end-user <u>must</u> select the *Tables*, *Records* and *Fields* utilized in the query. Query results are displayed in an Excel spreadsheet format. *The end-user must have an idea of what the spreadsheet data will include before selecting any tables, records or fields.*
2.	Queries will only be created in the **Reports** database and will be saved as *private queries*. Only you will be able to view and run a query you create, unless you specifically share it with another user. Queries contained in the Reports database that are predefined are public queries. A plethora of public queries are available for HCM end-user benefit. Access to these queries is determined by the end-user's security access (Operator ID). If you edit an existing public query, make sure you *save* the query under a *new name*.

Training Guide
Intermediate - Fluid
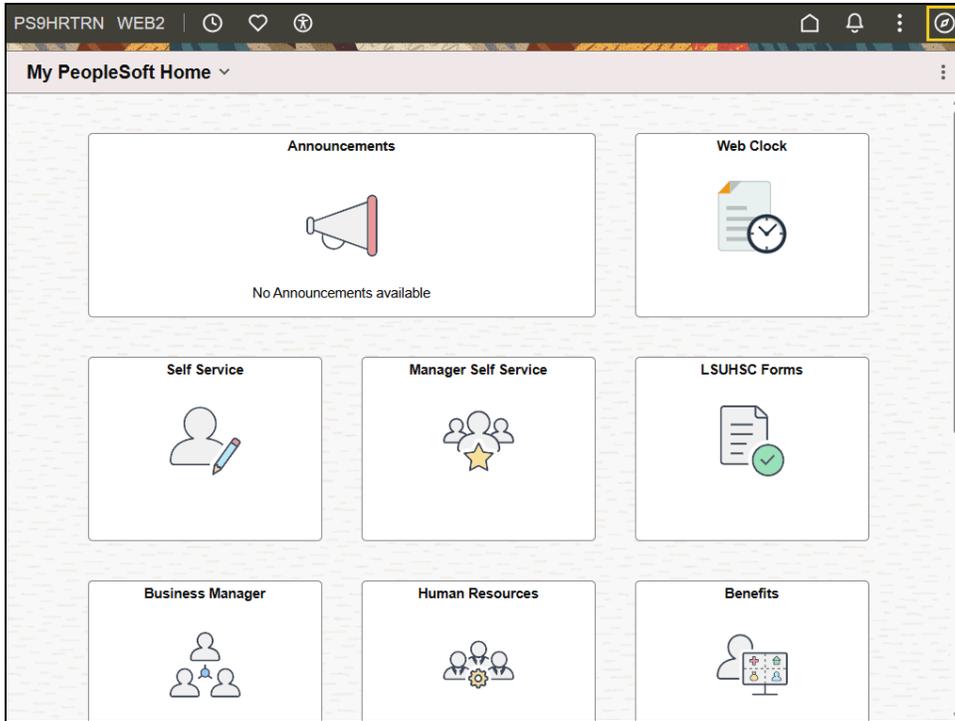
Step	Action
3.	Click the **NavBar** button.
4.	Click the **Menu** button.
5.	Click the **Reporting Tools** menu.
6.	Click the **Query** menu.
7.	Click the **Query Manager** button.
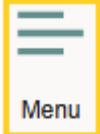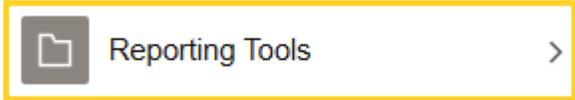
Step	Action
8.	Click the **Create New Query** link. Create New Query
9.	Across the top of the page are *nine tabs* that can be used in creating or amending a query. The system defaults you onto the **Records** tab. In this tab you will select the *tables and/or records* you wish to use in your query. *Tables and records* are listed in *alphabetical* order.
10.	The user may *search* for *tables and records* utilizing one of the following methods: 1. Enter appropriate search criteria (Table/Record name) into the **Search By* field. The user <u>must</u> enter *all or part* of the name. Use the *% (percent sign)* to act as a wildcard when searching. Names can be entered in upper, lower or mixed case. 2. Click the **Search** button to view a list of all existing tables and records. 3. Users may also click the **Advanced Search**. The user can change the *Record Name* parameter from '*begins with'* to '*contains'* - or to another available parameter - to search for a table or record.
11.	**Scenario** In this exercise, you will use fields from one record - the **EMPLOYEES** record. The following fields will be selected from the table: **1.** EMPLID **2.** NAME **3.** HIGH_EDUC_LVL **4.** ORIG_HIRE_DT **5.** DEPTID
12.	Enter the desired information into the ***Search By** field. Enter "**employees**".
13.	Click the **Search** button. Search
14.	Only one option is returned in the search results. However, if you are unsure if this is the correct record to use, simply click the **Show Fields** link to view the fields that comprise the record. Click the **Show Fields** link. Show Fields
15.	There are 241 fields associated with this record. You would scroll through the list to determine if all fields were included. Press the left mouse button and drag the mouse down to the bottom of the page.

Step	Action
16.	All fields are found on this record, so you will select it for your query. Click the **Return** button. Return
17.	Click the **Add Record** link. Add Record
18.	In this example, an Effective Date criteria message displays and occurs anytime an effective dated record is selected. This allows you to modify the date criteria of the record. For this record, all data will be retrieved with effective dates prior to the current date. Click the **OK** button. OK
19.	**Selecting Fields** The *record* and the *fields* in the record appear on the **Query** tab. It is here that you will select the fields to build your query. Simply click the *checkboxes* to the left of the field name to select it. To *deselect* a field, click the checkbox again or click the *Uncheck All Fields* button to deselect all checked fields.
20.	**Key Field** A field with a *key* to the left of the field name is called a **Key Field**. The *key* indicates the field as a *common field* to multiple records. **Key Fields** provide a *link* when *joining* multiple tables and/or records together when building a query.
21.	**Add Criteria** The *funnel with a plus sign* found on the far right of the page for each field is called the **Add Criteria** button. Adding criteria allows you to *reduce* the number of rows returned in your results and *retrieve* only the data you need at the time the query runs. ***See the Working with Criteria and Prompts section for additional information regarding using criteria.***

Step	Action
22.	Fields default in hierarchical order (i.e., the Key fields in the record appear at the top of the list). Fields may be sorted and viewed alphabetically by selecting the **Sort fields alphabetically** button. Select the button a second time to return to the original view. Click the **Sort fields alphabetically** button.
23.	Click the **Sort fields alphabetically** button to return to the original view.
24.	The following fields will be selected for your query: EMPLID, NAME, HIGH_EDUC_LVL, ORIG_HIRE_DT, and DEPTID. Click the **EMPLID - Empl ID** option.
25.	Click the **NAME - Name** option.
26.	If a field is not on the first page of your results, you can use the **Find** feature to search for the field rather than going from page to page. The **Find** function is c*ase sensitive*, unlike the **Search** function which is <u>not</u>. Click the **Find** button.
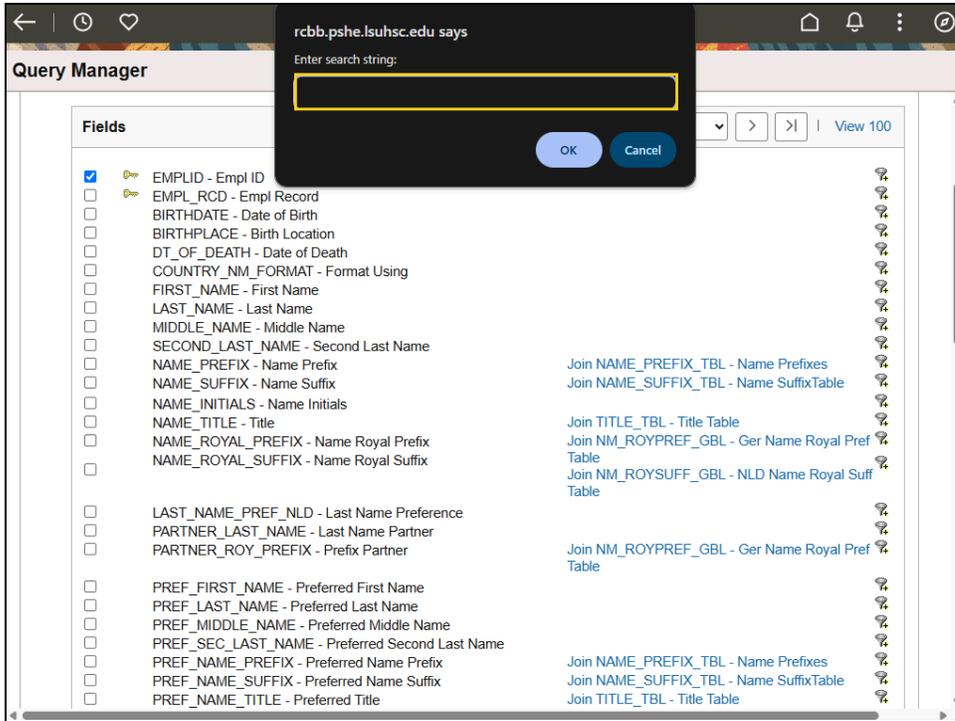
Step	Action
27.	Enter the desired information into the **Enter search string:** field. Enter "**HIGH**".
28.	Click the **OK** button.
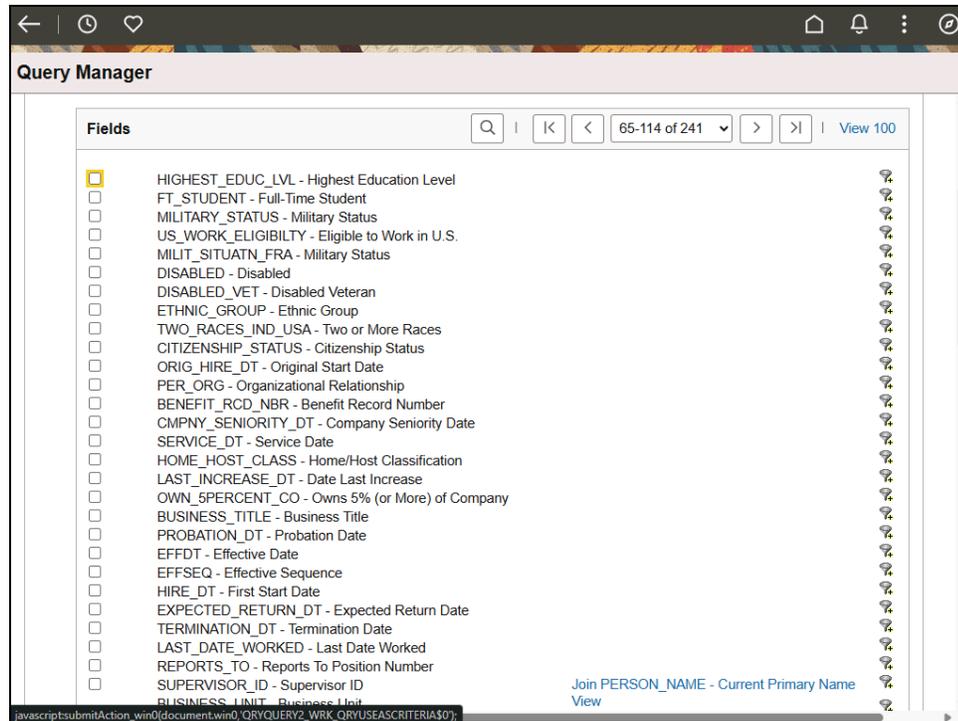
Step	Action
29.	Click the **HIGHEST_EDUC_LVL - Highest Education Level** option.
30.	Click the **ORIG_HIRE_DT - Original Hire Date** option.
31.	Click the **Find** button.
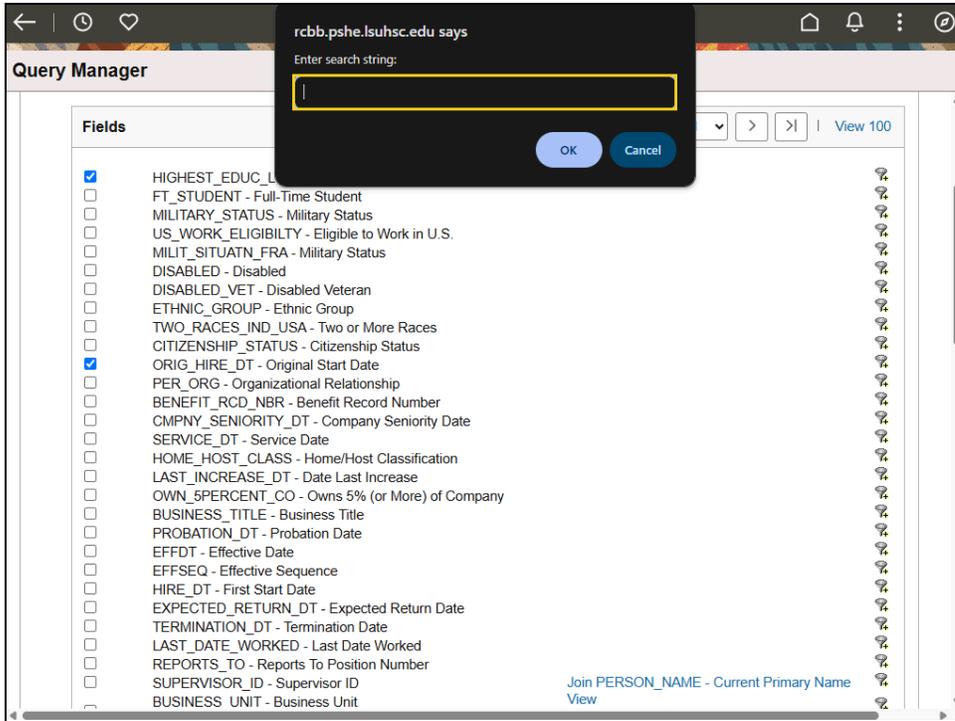
Step	Action
32.	Enter the desired information into the **Enter search string:** field. Enter "**DEPTID**".
33.	Click the **OK** button.

Step	Action
34.	Click the **DEPTID - Department** option.
35.	The fields selected on the **Query** tab only affect which fields are shown in your spreadsheet results. Click the **Fields** tab.
36.	Verify all the fields needed for your spreadsheet are shown on the **Fields** tab. If all fields are <u>not</u> shown, return to the **Query** tab to select any missing fields. *Selected fields displayed in spreadsheet order on the Fields tab.* Users can make *format* changes to the query *layout* from the **Fields** page. ***See the "Format a Query" topic for additional information.*** The **Run** tab allows you to *preview* the query results and *verify* you are retrieving data for all selected fields. Click the **Run** tab.

Step	Action
37.	All fields have populated with data, so you know your query is working as it should. Click the **Fields** tab. Fields
38.	It is recommended that you *name* and *save* your query before getting too far in the process. Click the **Save As** link. Save As

Step	Action
39.	The **Query* and *Description* fields each have a maximum length of *30 characters*. No special characters (e.g., $, &, #, etc.), except for an underscore, can be used in the query name. The **Query* name can be entered in upper or lower case but will be changed by the system to upper case when saved. The *Description* can be entered in upper or lower case and will not change when saved. Enter the desired information into the ***Query** field. Enter "**EMPL_HIGH_EDU_LIST**".
40.	Enter the desired information into the **Description** field. Enter "**EMPLOYEE HIGH EDUCATION LIST**".

Step	Action
41.	Enter the desired information into the **Query Definition** field. Enter "**04/24/25 CLASS EXERCISE**".
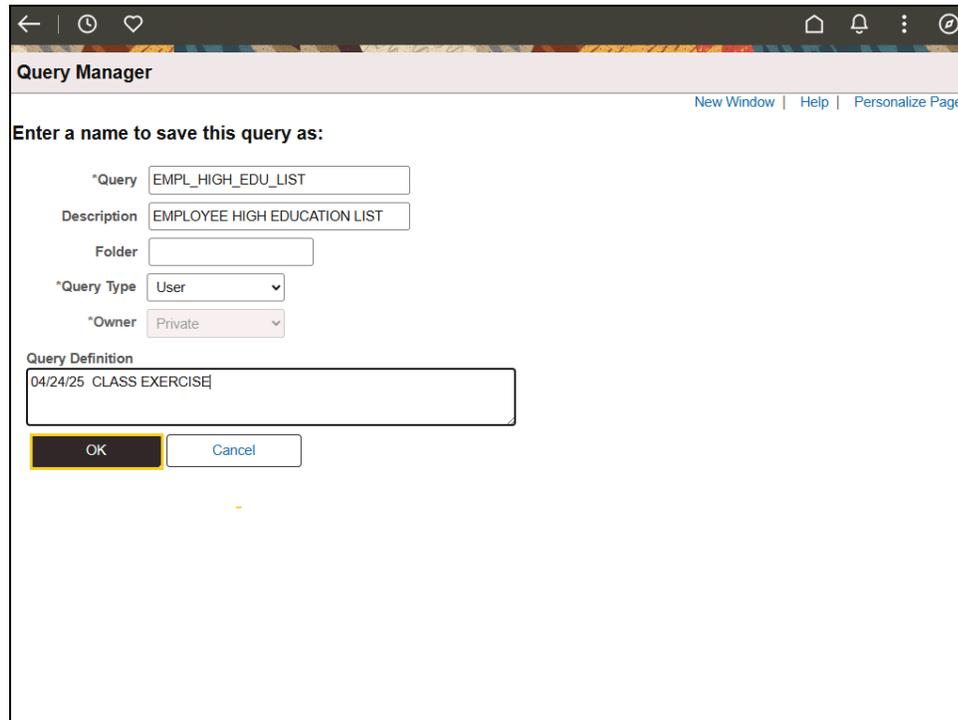
Step	Action
42.	Click in the **OK** field.
43.	This completes *Create a New Query*. **End of Procedure.**

Training Guide
Intermediate - Fluid

Format a Query

Procedure

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

Step	Action
1.	Selected fields will display on the **Fields** tab in spreadsheet result order. The *Heading Text* column shows each field's column title.
2.	Notice the '**N**' value in the *XLAT* column for HIGHEST_EDUC_LVL. *XLAT* is an abbreviation for *Translate Value* which is a specific text or label that is stored in a table. There are *three values* used for *Translate Values*: • **N (None)** option will display the default translate code (e.g., "G" = 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) *NOTE: Translate Values will appear on the page if the field does not have an associated value. Translate Values and Heading Titles may be changed by clicking on a field's Edit button.*

Step	Action
3.	Click the **HIGHEST_EDUC_LVL Edit** button. Edit
4.	In the **Heading** box: • The **RFT Short** option will display the default selection (Hi Educ Lv) in the column heading. • The **RFT Long** option will display the long description (Highest Education Level) in the column heading. • The **Heading Text** option will display the free text (that you type) in the column heading. • **No Heading** will leave the column heading blank.
5.	Click the **Text** option. ○ Text
6.	Enter the desired information into the **Heading Text** field. Enter "**HIGH EDUCATION LVL**".
7.	Click the **Long** option. ○ Long

Step	Action
8.	Click the **OK** button. OK
9.	Click the **Reorder/Sort** button. Reorder / Sort
10.	The *left side* of the panel is used to *reorder*, or *change* the order, of the columns will display in your spreadsheet results. The *right side* of the panel is used to *sort* your data. When running your query, *data will sort based on the field in the first column*. For this example, the data will sort by EmplID. *Sort* allows you to *change how the data is ordered* in your spreadsheet without having to change the column order.
11.	***Reorder Columns*** You will first reorder your columns. EmplID and Name will stay in their designated positions. *DEPTID* will change to column **3**, *HIGHEST_EDUC_LVL* to column **4**, and ORIG_HIRE_DT to the **5** position. Enter the desired information into the **DEPTID** field. Enter "**3**".
12.	Enter the desired information into the **HIGHEST_EDUC_LVL** field. Enter "**4**".
13.	Enter the desired information into the **ORIG_HIRE_DT** field. Enter "**5**".
14.	**Sort Data** Currently your data is sorted by EMPLID in ascending order, because it is the first column of your spreadsheet. You can change whether your data sorts ascending or descending simply by checking the box for the desired field in the Descending column. Click the **HIGHEST_EDUC_LVL Descending** option. ☐
15.	You can change how your data will sort by placing a "**1**" in the **New Order By** column for the field you wish to sort by first. In this example, use the **HIGHEST_EDUC_LVL** field as your first sort option. Enter the desired information into the **HIGHEST_EDUC_LVL New Order By** field. Enter "**1**".
16.	You can sort by more than one data type. In this example, you place a "**2**" in the **New Order By** column for **ORIG_HIRE_DT**. Enter the desired information into the **ORIG_HIRE_DT New Order By** field. Enter "**2**".

Step	Action
17.	Click the **OK** button. OK
18.	The **Col** order shows the changes made using the *Reorder* option. The **Ord** column displays the changes made using the *Sort* option. Click the **Run** button. Run
19.	A total of 9,073 results are returned, and is sorted by HIGHEST_EDUC_LVL and then ORIG_HIRE_DT. Click the **Fields** tab. elds
20.	Click the **Properties** link. Properties
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 duplicated rows of data. However, the end-user should note that this option may remove pertinent duplicated information, depending on the query.*** Therefore, if the end-user is <u>not</u> 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 <u>not</u> be removed, then the **Distinct** option is available. Click the **Distinct** option. ☐ Distinct
22.	Press the left mouse button and drag the mouse down to the desired location.
23.	Click the **OK** button. OK
24.	Click the **Save** button. Save
25.	This completes *Format a Query*. **End of Procedure.**

Working with Criteria and Prompts

Add a Single Criteria

Procedure

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

Step	Action
1.	The user can add criteria to a field to limit the results returned and retrieve only pertinent data. In this example, you will add a *single* criterion - **J - Doctorate (Academic)** - to HIGHEST_EDUC_LVL. Click the **HIGHEST_EDUC_LVL Add Criteria** button.
2.	The field name defaults into the *Record Alias.Fieldname* box. The *Condition Type* defaults to **"equal to"**. *Choose Expression 2 Type* defaults to **Constant**. Click the **Define Constant - Select Constant from List** button.
3.	Click the **J - Doctorate (Academic) - Select Constant** link.

Step	Action
4.	Click the **OK** button. OK
5.	Click the **Run** button. Run
6.	A total of 22 results are retrieved. Click the **Criteria** tab. Crite
7.	The **Criteria** tab now indicates HIGHEST_EDUC_LVL = J. Click the **Save** button. Save
8.	This completes *Add a Single Criteria*. **End of Procedure.**

Add a Group of Criteria using "In List"

Procedure

In this topic you will learn how to **Add a Group of Criteria using "In List"**.

Step	Action
1.	***NOTE: When changing the criteria of a field that has already been added to the Criteria tab, do <u>not</u> return to the Fields tab to add the field to the Criteria tab again. Doing so will cause an error in your search results. Instead, edit the field that already appears in the Criteria tab by clicking the*** Edit ***button.*** Click the **HIGHEST_EDU_LVL Edit** button. Edit
2.	Select the ***Condition Type** to choose the "**in list**" 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.*** Click the button to the right of the ***Condition Type** field.
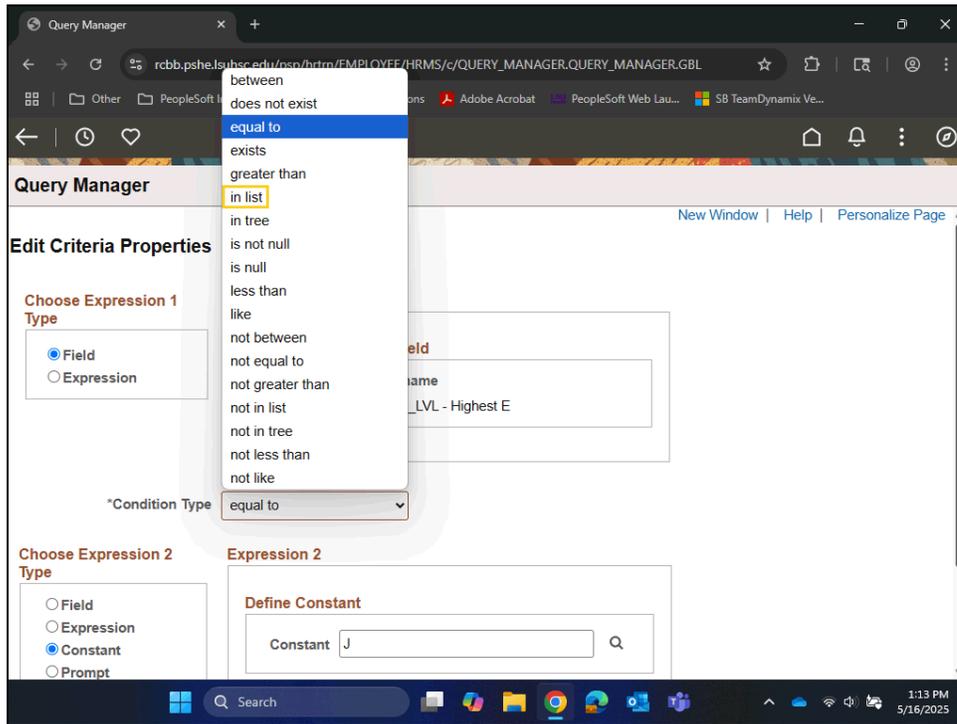
Step	Action
3.	Click the **"in list"** list item. in list
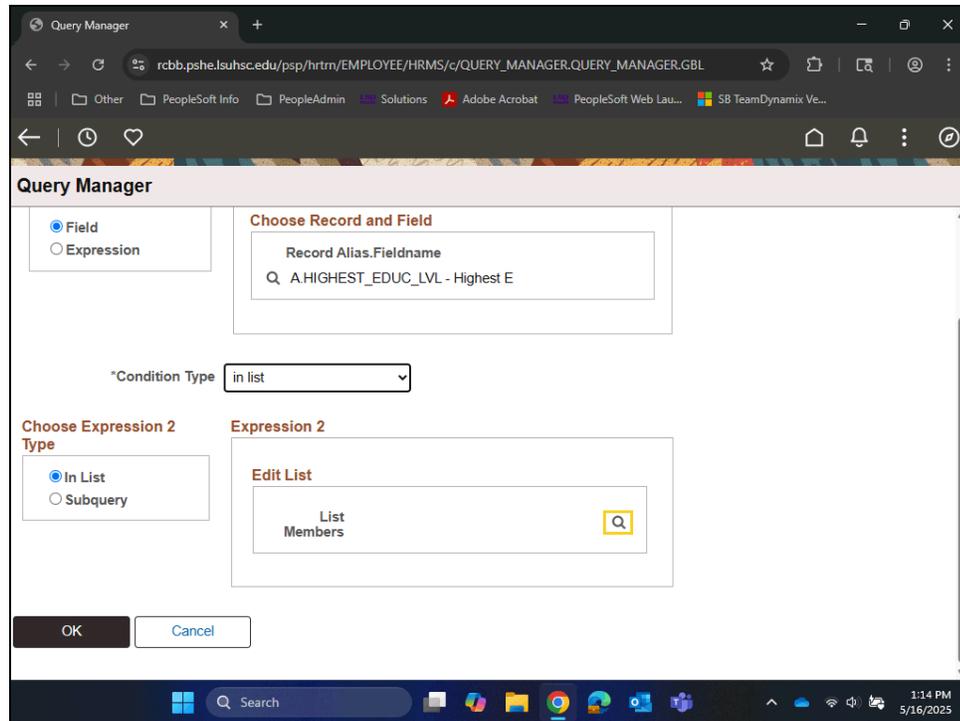
Step	Action
4.	Click the **Select List Members** button.
5.	Click the **Bachelor's Level Degree Add Value** button.
6.	Click the **Some Graduate School Add Value** button.
7.	To delete a value, **check the box** that appears in *front of the value* that you wish to delete under *List Members* and click the **Delete Checked Values** button.
8.	Click the **OK** button.
9.	Click the **OK** button.

Step	Action
10.	The **Criteria** tab now indicates **HIGHEST_EDUC_LVL** with the values **G,H**,and **I**. Click the **Save** button. Save
11.	The **Criteria** tab now indicates **HIGHEST_EDUC_LVL** with the values **G,H**,and **I**. Click the **Run** tab. Run
12.	The query results are *limited* to employees whose *highest education level* is a **Bachelor's Level Degree**, **Some Graduate School**, and/or a **Master Level Degree**. Click the **Fields** tab. Fields
13.	This completes *Add a Group Criteria using "In List*." **End of Procedure.**

Using "Between" Criteria

Procedure

In this topic you will learn about **Using "Between" Criteria**.
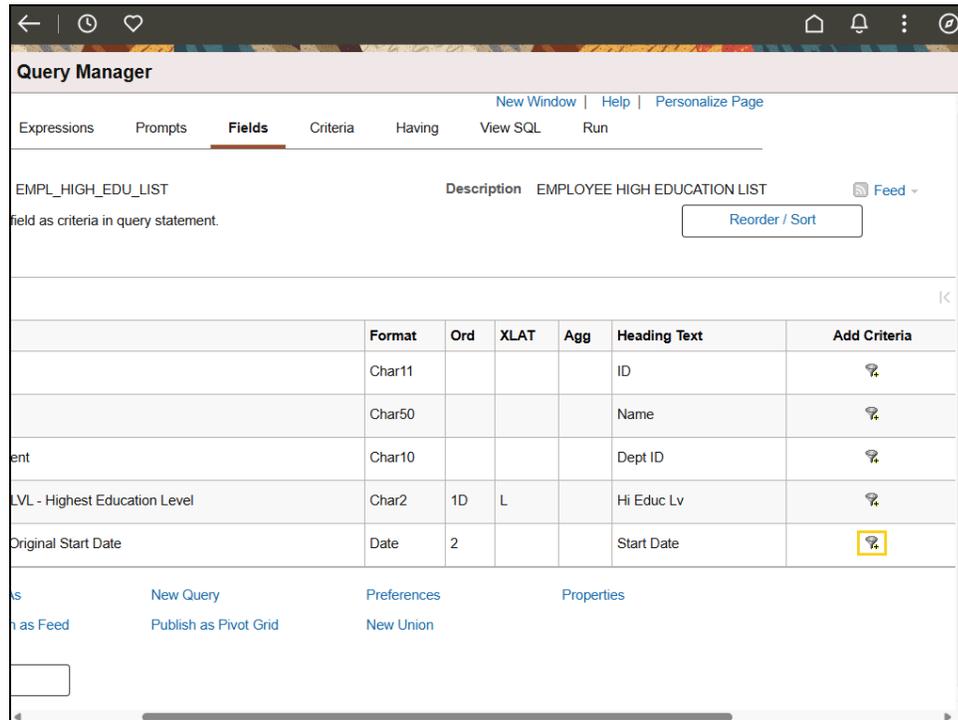
Step	Action
1.	Click the **ORIG_HIRE_DT Criteria** button.
2.	Click the button to the right of the ***Condition Type** field.
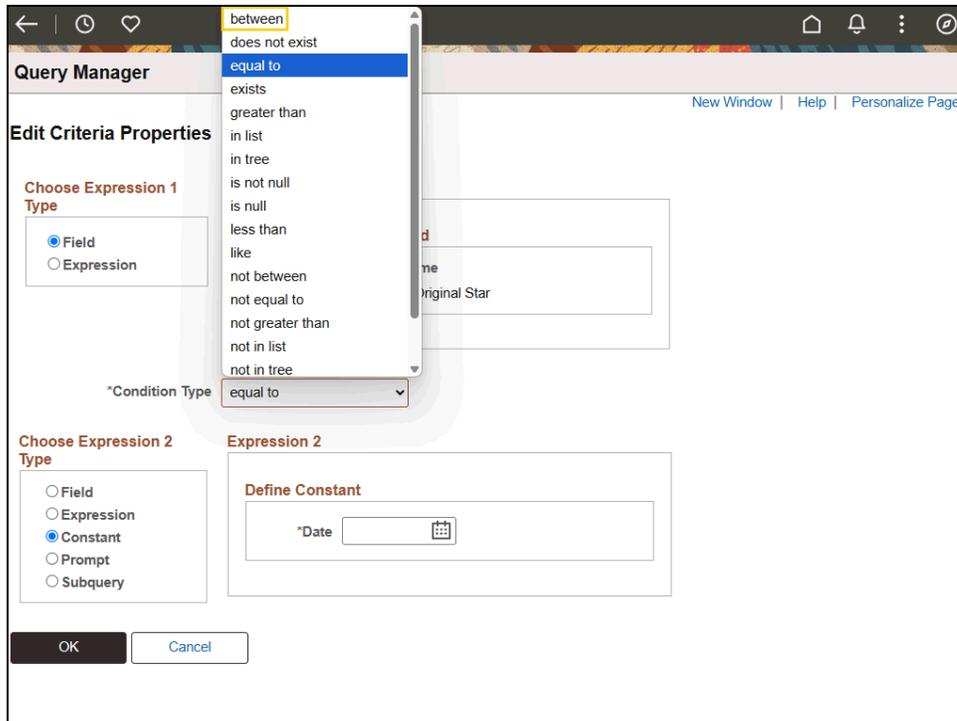
Step	Action
3.	Click the **between** list item.
4.	Enter the desired information into the **Define Constant *Date** field. Enter "**010125**".
5.	Enter the desired information into the **Define Constant 2 *Date 2** field. Enter "**043025**".

Step	Action
6.	Click the **OK** button.
7.	Click the **Save** button.
8.	Click the **Run** tab.
9.	In addition to the highest education level criteria level criteria established in the previous exercise, the query output now also reflects only those employees hired between **01/01/25** and **04/30/25**. Click the **Criteria** tab.
10.	This completes *Using "Between" Criteria*. **End of Procedure.**

Create a "Prompt" for Criteria

Procedure

In this topic you will learn how to **Create a Prompt for Criteria**.

Step	Action
1.	Click the **EHIGHEST_EDUC_LVL Edit** button. ![Edit] Edit
2.	Click the button to the right of the ***Condition Type** field. ⌄

Step	Action
3.	Click the **equal to** list item.
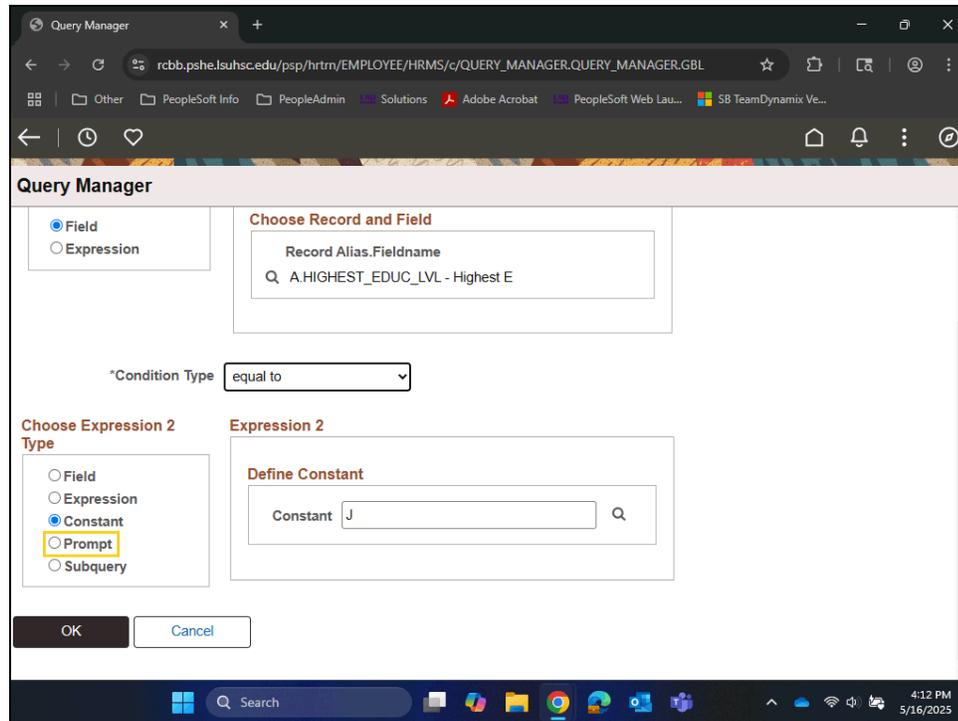
Step	Action
4.	Click the **Prompt** option. ⊘ Prompt
5.	Click the **New Link** link. New Prompt
6.	*NOTE: Most users will not make changes to the default values on the Edit Prompt Properties page.*
7.	Click the **OK** button. OK
8.	Your prompt is indicated in the Define Prompt box by a :1. This signifies that one prompt has been created. Additional prompts will be designated as :2, :3, etc. Click the **OK** button. OK

Step	Action
9.	*NOTE: You must Save your changes before selecting another link from the menu (e.g., Reporting Tools) by selecting the Save or Save As button. <u>There is no Warning that changes will be lost.</u>* Click the **Save** button. Save
10.	Click the **Run** tab. Run
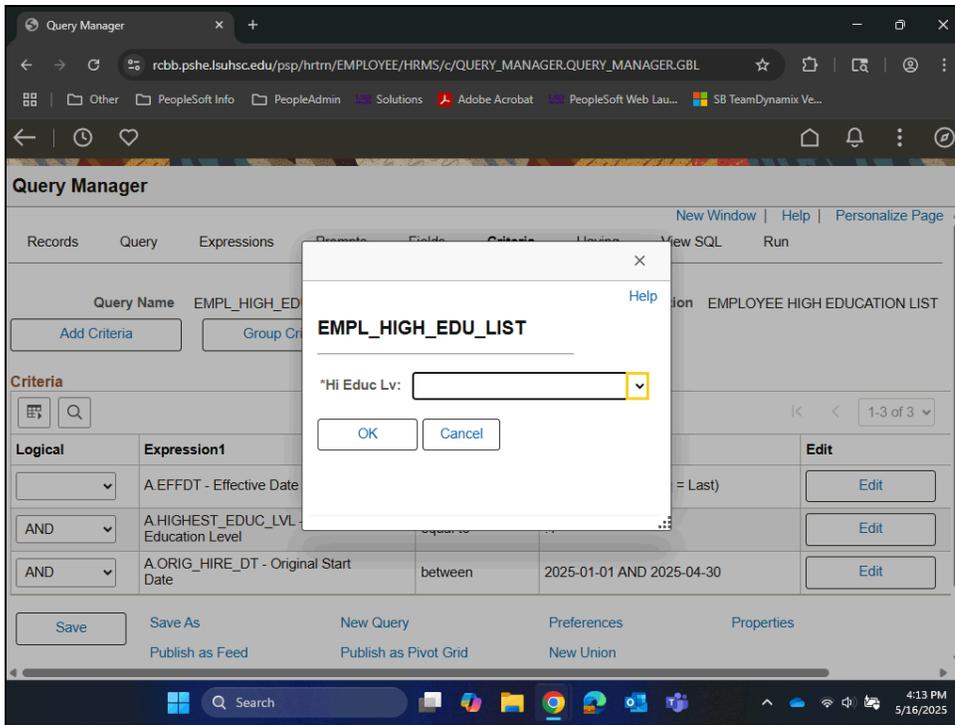
Step	Action
11.	You are prompted to select the desired highest education level. In this example, you will select **Medical Doctor**. Click the button to the right of the ***Hi Educ Lv:** field. ⌄
12.	Click the **Medical Doctor** list item. Medical Doctor
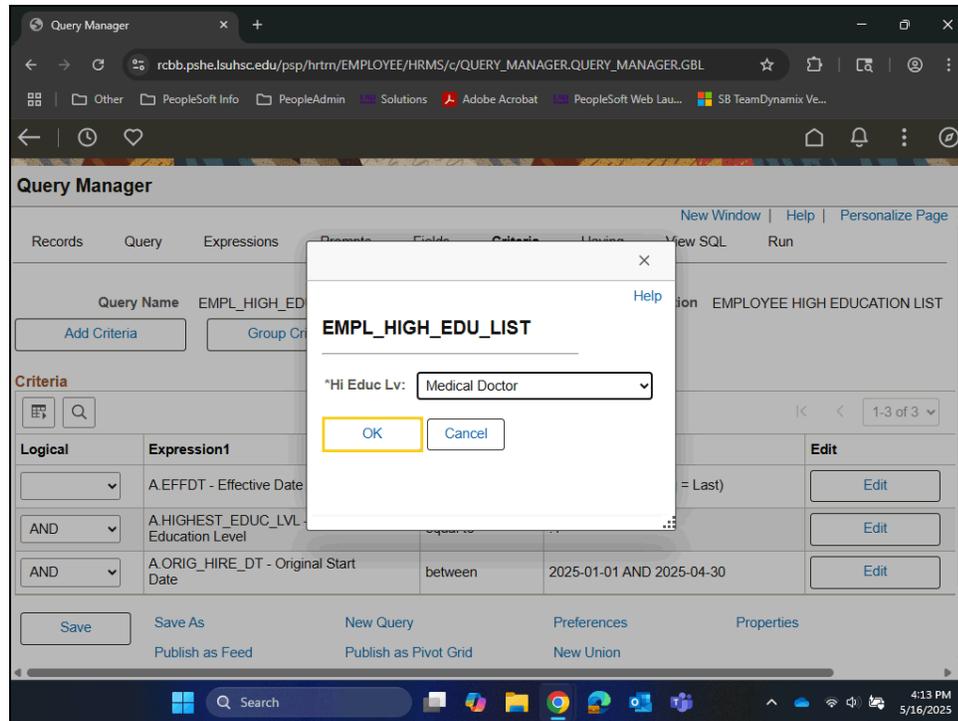
Step	Action
13.	Click the **OK** button. OK
14.	The query results display those employees whose highest education level is **Medical Doctor**. Click the **Home** button. ⌂
15.	This completes *Create a Prompt for Criteria*. **End of Procedure.**

Using Multiple Tables in 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 three join types covered in Query Intermediate are the following:
1. Record Hierarchy joins - parent - child relationship
2. Related Record joins - predefined relationships
3. Any Record joins - relationships the user defines

In this lesson you wish to retrieve a query that provides a list of employees with their **EmplID, Job Code, DeptID, Name and Job Title (Descr)**. The **Personal_Data** record contains the **EmplID** and *Name* fields. The **Job** record contains the J**ob Code** and **DeptID fields,** but not the **Descr field**. The **Descr** field is found in the **Jobcode** table. Therefore, it will be necessary to pull the fields from three different tables (**Personal_Data, Job** and **Jobcode**) to retrieve the desired query results.

Any Record Joins and Related Record Joins

Procedure

In this topic you will learn how to use **Any Record Joins and Related Records Joins**.
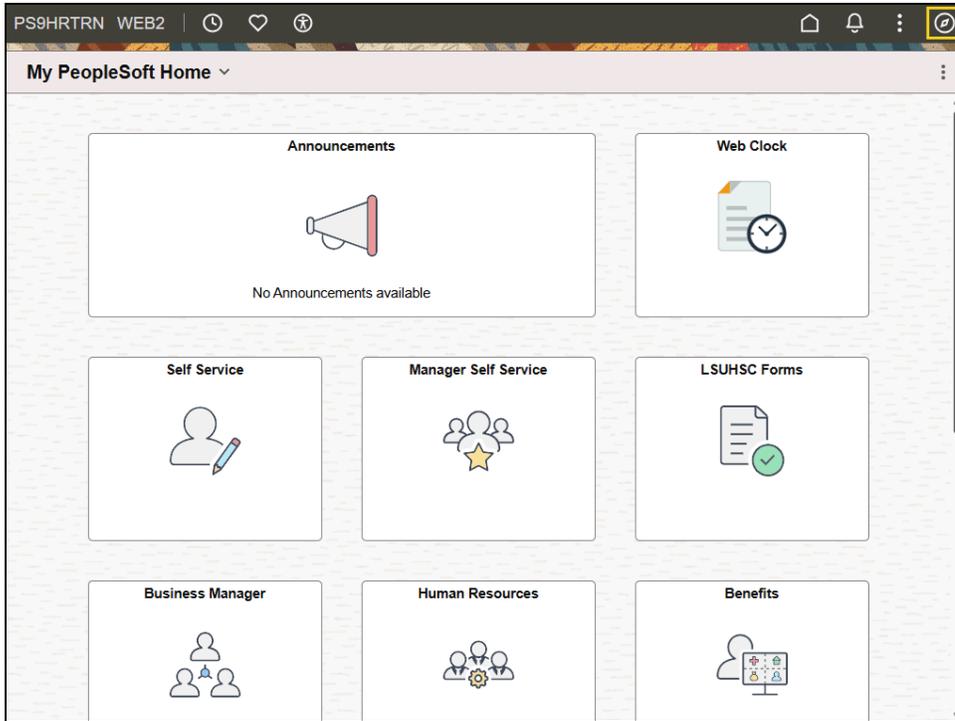
Step	Action
1.	Click the **NavBar** button.
2.	Click the **Menu** button.
3.	Click the **Reporting Tools** menu.
4.	Click the **Query** menu.
5.	Click the **Query Manager** button.
6.	Click the **Create New Query** link.
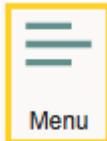
Step	Action
7.	In this example, you will create a query using a "**Any Record Join**" and a "**Related Record Join**" to create a list of *employees*, *dept ids*, and *job titles* and *descriptions*.
	Search for the record **Personal_Data**.
	Enter the desired information into the ***Search By** field. Enter "**PERSONAL**".

Step	Action
8.	Click the **Search** button.
9.	Click the **PERSONAL_DATA Add Record** link.
10.	*NOTE: Query displays a letter in front of each record or table. This letter is an alias that represents the record or table. When joining records or tables, Query assigns subsequent letters.* Click the **EMPLID - Empl Id** option.
11.	Click the **NAME - Name** option.
12.	*NOTE: This is an "Any Record Join."* Click the **Record** tab.
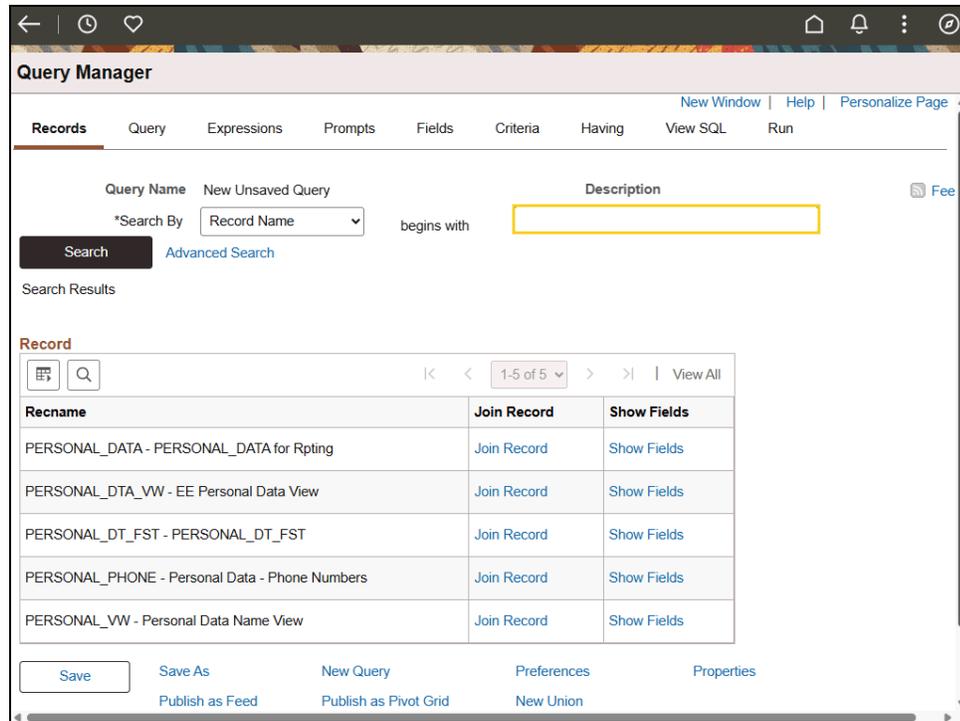
Step	Action
13.	In this example, you will search for the **JOB - EE Job History**. Enter the desired information into the ***Search By** field. Enter "**JOB**".

Step	Action
14.	Click the **Search** button. ![Search button]
15.	Click the **JOB - EE Job History Join Record** link. ![Join Record]
16.	The **Join Type** defaults to a *Standard Join* and will remain as defaulted. The **Join Record** defaults to our first record *A = PERSONAL_DATA - PERSONAL_DATA for Rpting*. Click the **A = PERSONAL_DATA - PERSONAL_DATA for Rpting** link. ![A = PERSONAL_DATA - PERSONAL_DATA for Rpting]
17.	*NOTE: The Query tool has detected alike fields in both queries. In most cases, you should continue with the default fields.* Click the **Add Criteria** button. ![Add Criteria]
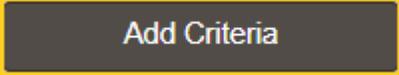
Step	Action
18.	Click the **OK** button.
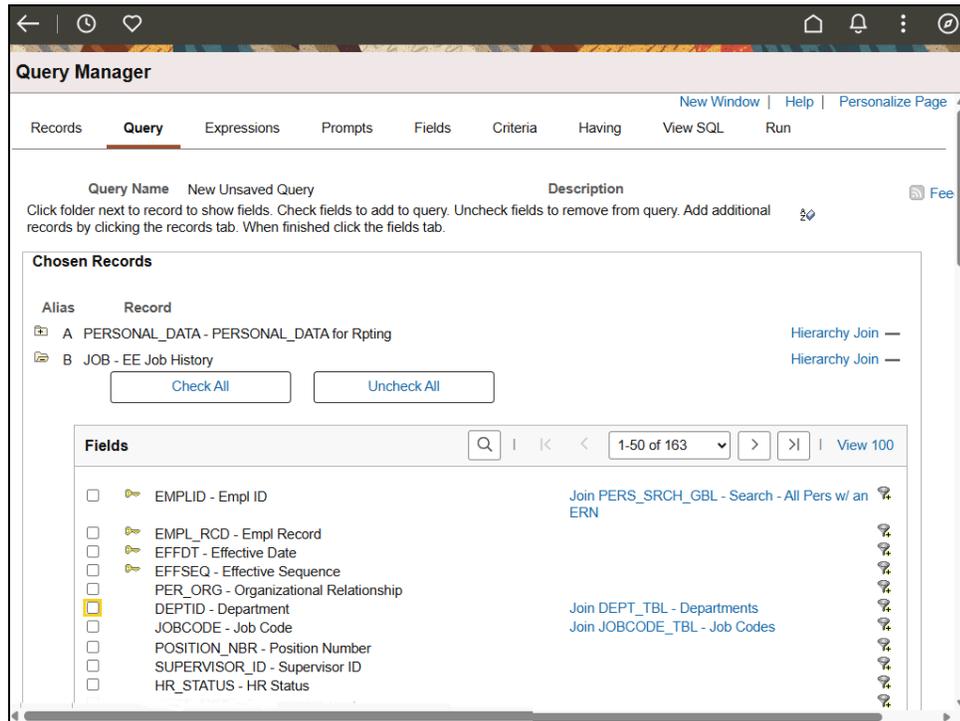
Step	Action
19.	Click the **DEPTID - Department** option.
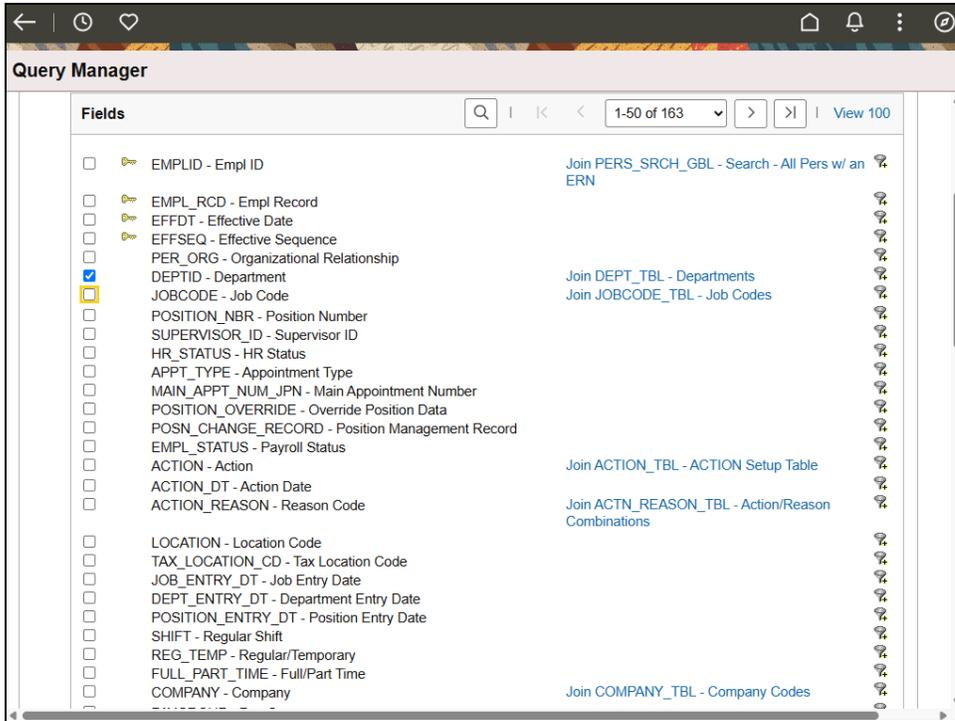
Step	Action
20.	Click the **JOBCODE - Job Code** option.
21.	Click the **Join JOBCODE_TBL - Job Codes** link.
22.	The **Join Type** defaults to *Standard Join* and will remain as defaulted. Click the **OK** button.
23.	Click the **OK** button.
24.	Click the **DESCR - Description** option.
25.	Click the **Fields** tab.

Step	Action
26.	*NOTE: Query displays a letter in front of each field. This letter is an alias that represents the record or table from which the field was pulled. When joining records or tables, Query assigns subsequent letters.* Click the **Save As** link. ![Save As button]
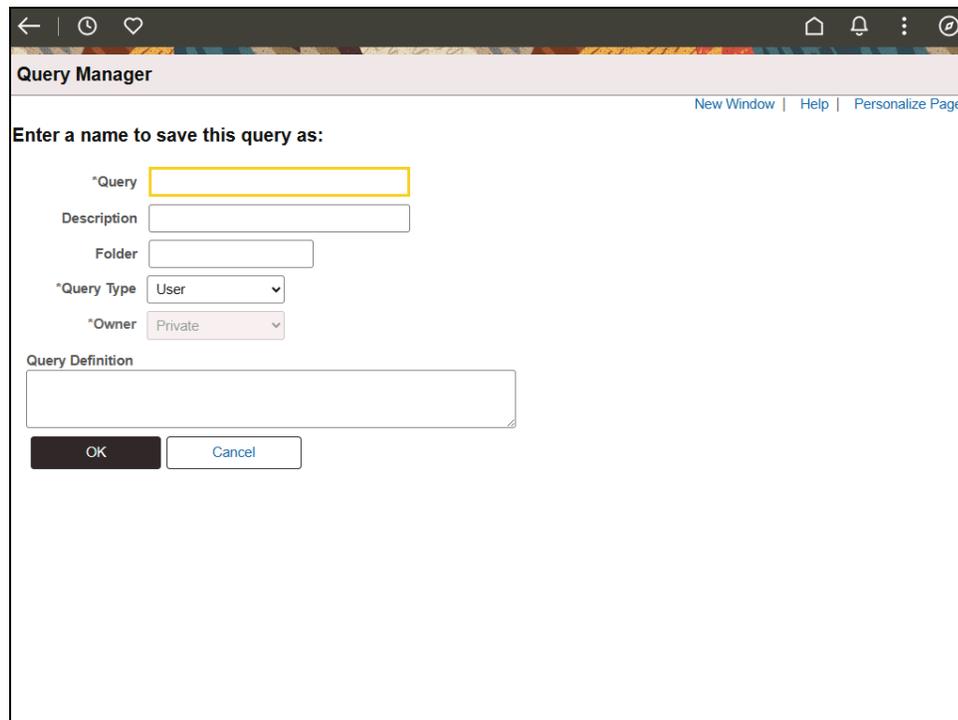
Step	Action
27.	Enter the desired information into the ***Query** field. Enter "**EMPL_JOB_TITLES**".
28.	Enter the desired information into the **Description** field. Enter "**EMPLOYEE JOB TITLES**".
29.	Enter the desired information into the **Query Definition** field. Enter "**05/19/25**".
30.	Enter the desired information into the **Query Definition** field. Enter "**CLASS EXERCISE**".

Query Manager

New Window | Help | Personalize Page

Enter a name to save this query as:

*Query	EMPL_JOB_TITLES
Description	EMPLOYEE JOB TITLES
Folder	
*Query Type	User
*Owner	Private

Query Definition

05/19/25 CLASS EXERCISE

[OK]   [Cancel]

Step	Action
31.	Click the **OK** button. OK
32.	Click the **Run** tab. Run
33.	Click the **Home** button. ⌂
34.	This completes *Any Record Joins and Related Record Joins*. **End of Procedure.**