JOINS:
Joins are used to connect 2 or more tables within the query workspace, in order to pull information from those tables in which 1 or more field names have been added to either the request line or filter line. Joins are created by dragging a field name from one table and connecting it to another in a separate table. In order for the query to work, the joined field names in both tables must contain the same value type or criteria; however the actual field names may not match. For example; joining by academic period, you would either use academic period to academic period OR academic period desc to academic period desc. However, when joining on whether a student is UG or GD, one table may have it listed as Program Level / Program Level Desc (Student_Bu) and another table may have it listed as Academic Study Value / Academic Study Value Desc (GPA). Although the field names are clearly different, the values contained within the names are the same.
Typically one join is enough to link the information between tables; however in some cases, a second join is required in order to better associate the information within the tables. In very rare cases a third join may be needed for a stronger link.
There are 3 commonly used joins; simple, right, and left.

**Simple:** This type of join is the most common and is the default option when a join is created. It is represented with an equal sign ( = ) and simply means you want the values from both tables to match exactly. With this join, your results section will display matching values that are contained in both tables.

**Left/Right:** This type of join is used when there are matching values within the joined tables; however, because of filter and/or request line items being used, some of the values will not display in the results section if a simple join were used.
Placement of the driving table within the query workspace will influence whether to use a left (+=) or right (=+) join.

The following is an example of a left join. Our query is looking for students who are officially enrolled for a particular semester, as well as their overall (cumulative) GPA. When the query is processed (run) using a simple join, there are 16,176 students. However, if we use a left join, we now have 16,553 students. The reason for the difference is because with the simple join, only the matching values of being officially enrolled and having a calculated overall GPA in Banner will display. When a left join is used, all the values from the left table (Student_Bu) will now display, in addition to all the values from the right table (GPA), including those where there is no information to display (matching values). In this case, a student can be officially enrolled for a semester, but not have a GPA calculated in Banner. The students where the GPA value is blank, are most likely new and therefore do not currently have a GPA in Banner, but are officially enrolled.
In the example results section below, we can see that the student in row 2 is officially enrolled but does not currently have a calculated GPA in Banner.