BEGIN, click **Report Studio** click from Cognos8 Welcome Screen
Select **UDSIS_Term_Extract** package.

**Create a List Report**

In this topic, you will create a list report for the Registrar. The user community requested a report of that lists student ID's by career, college, and department for the Newark Campus for the Spring of 2007 (exclude students on leave). Also add Honors flag and current and cumulative hours.

**Add Data**
1. When you start Report Studio, you must select a type of report. In this topic, let's create a list.

Click **Create a new report or template**, and then double-click **List**.

2. The **Insertable Objects** pane on the left shows the items that you can place in the report. Let's start by adding **UD_ID**, **PRI_CAREER**, **College**, **ACADEMIC_ORG** from the package.

Open Query Subject **UDSIS_Term_Extract** (expand the ‘+’ sign)

Double-click **UD_ID**, **PRI_CAREER**, **College**, **ACADEMIC_ORG**.
3. Honors flag is in the Honors/Athletics Folder. Let's add HONORS_FLAG to the report.

Open Honors/Athletics and double-click HONORS_FLAG.

4. Credit Hours is in the Statistics Folder. Let's add Cumulative Hours.

Open Statistics and double-click CUR_REGISTERED_HOURS and CUM_EARNED_HOURS.

5. Let's add Academic Org description next to ACADEMIC_ORG. Another way to add data is to drag the item into the report.

Close Honors/Athletics and Statistics, and then open Descriptions. Click ACAD_ORG_LDESCR and drag into the report next to ACADEMIC_ORG. A thick black line indicates where the item will be dropped.

6. You can run the report in different formats when you want to view what the report will look like for your users. Let's run the report in HTML format, which is the current setting.
Click the run button on the toolbar.

7. Close the **Cognos Viewer** window.
**Calculate**

1. The list report must show total cumulative hours for each student, which will include transfer hours. Let's use the **Toolbox** tab to add a calculated column called **Total Cumulative Hours**.

   In the **Insertable Objects** pane, click the toolbox tab . You may need to scroll down in your browser window.

2. Let's add the **Query Calculation** object to the end of the report.

   Double-click the **Query Calculation** object.

3. Let's give the detail calculation a name that will appear in the report.

   Click the **Name** box and type ‘**Total Cumulative Hours**’. Click **OK**.

4. The Total cumulative hours will use one data item that is not in the report and one that is in the report. Let's add the item that is not in the report.

   Open **Statistics** folder and double-click **CUM_TRANSFER_HOURS**.

5. Cumulative Earned Hours must be added to the data item that is in the report.

   In the **Expression Definition** box, type in the addition expression (+).

6. Add the data item, **CUM_EARNED_HOURS** that is in the report.

   Click the data items tab , double-click **CUM_EARNED_HOURS**, validate the calculation and then click **OK**.
7. We no longer want to see the **CUM_EARNED_HOURS** in our report, let’s remove it.

Click the **CUM_EARNED_HOURS** heading, and click the delete button on the toolbar.

8. You added a calculated column. Let’s view the report.

Click the run button on the toolbar.

Close the **Cognos Viewer** window.
Filter
1. This report shows data for all Student Types that are in the package. Let’s only include active students that are not on leave and then limit the report to Newark Undergraduates.

Click the filters button on the toolbar, and then click the add button.

2. You can use data that is either in the report or not in the report. Let's use LEAVE_OF_ABSENCE FLAG, a data item that is not in the report. (Set LEAVE_OF_ABSENCE FLAG to No)

Double-click LEAVE_OF_ABSENCE FLAG
Add the = ‘N’ to the expression, Click OK.

4. Let's add the CAMPUS to the expression.

Click the add button.
Double-click CAMPUS Add the ‘=’ to the expression, and using the ‘Select Value’ icon, select ‘NEWRK’.
Click Insert. Click OK. twice

5. The report is now filtered to show data only for students not on leave and attending the Newark Campus.

6. Let’s sort the report by College and ACADEMIC_ORG.

For each item, click on the heading and select the sort button on the toolbar.
Let's view the report.

Click the run button on the toolbar.

(Note: We do have a handful of AA students on the Newark Campus)
**Section and Group**

1. Grouping data in a report makes it easier to locate and understand the information in the report. Let's group on College and have College appear above each section.

   Click the **College** heading, and click the create section button on the toolbar. 😁

2. Let's view the report.

   Click the run button on the toolbar. 🚀

3. **College** line is grouped and appears as a section heading. There are duplicate values in the Career column and the Academic Org column, which should be removed.

   Close the **Cognos Viewer** window.
4. Let's group on Career column and the Academic Org to remove duplicate values.

Click the **PRI_CAREER** heading, and click the group/ungroup button on the toolbar.

Click the **ACADEMIC_ORG** heading, and click the group/ungroup button on the toolbar.

5. Let's view the report.

Click the run button on the toolbar.

6. The report is grouped by Career column and the Academic Org.

Close the **Cognos Viewer** window.
Add a Total to a Column

1. You added data to the report, set filters, defined a calculation, and grouped the data. Let's add a count of students and a total to the current registered hours column.

Click the **UD_ID** heading, and click the aggregate button on the toolbar.

2. The menu lists all the calculations you can perform. Let's add a count.

Click **Count**

Repeat for **CUR_REGISTERED_HOURS** heading, but this time, total the column.

Click the heading, and click the aggregate button on the toolbar.

Click **Total**
3. Let's view the report now.

Click the run button on the toolbar.

4. Each grouping now has a total. For more information about summaries, see the Report Studio *User Guide*. Let's go to the next task of filtering data.

Close the **Cognos Viewer** window
Create a Crosstab Report:

In this topic, you will create a crosstab report for the Registrar who requested an Official Term Enrollment report that compares total student counts by residency and academic load. Students should be listed by student type (derivation of career, program, and campus) for the past two semesters.

Select UDSIS_Official_Extract package.

Add Data

1. When you start Report Studio, you must select the type of report to create. In this topic, let’s create a crosstab report that compares total student counts by residency. Students should be listed by student type (Career, program, and campus) for the past two semesters.

Click Create a new report or template, and then double-click Crosstab

2. The Insertable Objects pane on the left shows the data items that you can place in the report. Let’s start by adding academic term to the columns.

Open Query Subject UDSIS_Official_Extract (expand the ‘+’ sign)

3. Academic Term is added to the report. Let’s add Student Type to the rows.

Double-click Student_Type.

4. Let’s add Count as the measure.

Open Statistics folder and double click COUNT_FIELD (you could also have dragged it in).
5. Let's view the report.

Click the arrow next to the run button on the toolbar, and then click **Run Report - PDF**.

6. You created a simple crosstab. Let's add more data to this report to make it a nested crosstab.

Close the **Cognos Viewer** window.
Nest Data
1. You can nest data in the rows and columns of the report. Let's add a nested row between Student Type and Count field.

Open Demographics folder and click RESIDENCY and drag into the report next to Student_Type. A thick black line indicates where the item will be dropped.

2. Let's add a nested column between Academic Term and Count field.

Close Demographics folder. Click UD_ACADEMIC_LOAD and drag into the report under ACADEMIC_TERM. A thick black line indicates where the item will be dropped.
3. Let's view the report.

Click the run button on the toolbar.

3. Let's go to the next task of adding totals to the report.

Close the **Cognos Viewer** window.
Add Totals
1. Let's add a total columns and rows. We want the count of students also by residency, academic load, and Student type for each term.

This time, to save time, create the calculations all at once. Click the Student_Type heading, ctrl+click the RESIDENCY heading, and ctrl+click the UD_ACADEMIC_LOAD heading (we are not including ACADEMIC_TERM because we don’t want a total of the term) and click the aggregate button on the toolbar.

2. The menu lists all the calculations you can perform. Let's add a total.

Click Total
3. Let's view the report now.

Click the run button on the toolbar.

4. Each grouping now has a total.

Close the Cognos Viewer window
**Add Conditional Formatting**

1. You want to add meaningful descriptions to Residency and Academic Load. Let's define the variable.

Click the RESIDENCEY heading and double-click the **Text Source Variable** property.

2. Let's add a String variable and name it residence.

From the **Variable** box, select **String Variable**, click the **Name** box and enter 'residence', and click **OK**.

3. Let's add the variables 'N' and 'R'.

Click the add button. and type 'N' (for non-resident). Click **OK**.

Click the add button. and type 'R' (for resident). Click **OK**.

![Image of Cognos List lessons](image)
4. Let's define the Residency variable.

Double click RESIDENCY from Available Components or drag it into the Expression Definition box to add the variable. Click OK two times.

4. Let's format the values for the Residency variable.

Pause the pointer over the Condition Explorer button and click N under residence.

5. Double click to edit text in heading space and type ‘Out of State’ in text box. Click OK.

Repeat process for each variable.
6. Let's add a style by adding a background color to the Residency ‘In State’ column.

Click the In-State heading and double-click the **Style Variable** property.

From the **Variable** box, select **residence** and click **OK**.

7. Let's format the **R** (In-State) condition for the **residence** variable.

Pause the pointer over the **Condition Explorer** button, and click **R** under **residence**.

8. Let's specify a background color for the **R** condition on **RESIDENCY** column.

Double-click the **Background Color** property, and double-click **Navy** and click **OK**.

Double-click the **Foreground Color** property, and double-click **White** and click **OK**.

9. Each cell in the Residency column that is ‘R’ will have a yellow background. Let's view the report.

Click the run button on the toolbar.

![Cognos Viewer window](image)

Close the **Cognos Viewer** window.