

Oracle Analytics



Modern Data Visualization with Oracle Analytics



Section 3

Data Flow Deep Dive With
Oracle Analytics

Learning Topics in Section 3



Introduction to Data Flow

Create your first Data Flow

Run and Manage Data Flow

Create multiple target outputs with Data Flow

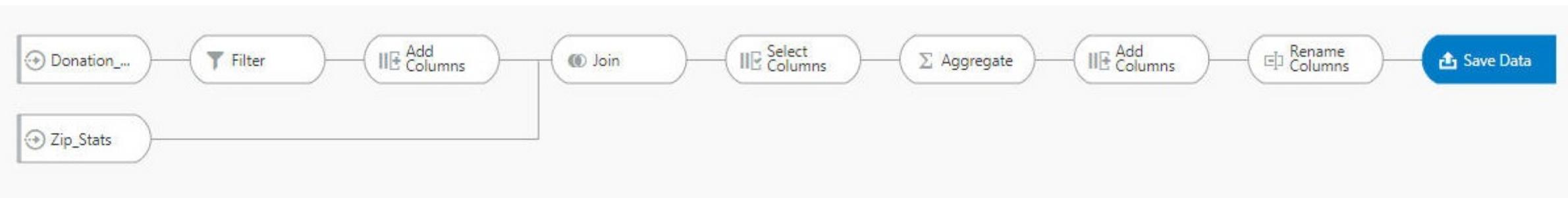
Sequence multiple Data Flows

Store Data Flow output to a Database

Create Sentiment Analysis with Data Flow

Demos and Lab Overview

Quiz



Introduction to Data Flow

What and Why of Data-flow

Lightweight transformational tool

- Simple and easy to use interface for business users to create sequential transformations

Create curated data-sets

- Enables business users to combine, organize and integrate data-sets
- Curated data-sets then form the basis of further analysis/DV projects
- Allows business users to send curated data, back to relational database or Essbase
- Enables training of machine learning models and application models for scoring of data
- Detects sentiment from a text column allowing for sentiment analysis

Project Overview

Donation Analysis



Section 3: Data Flow Deep Dive with Oracle Analytics

Project Overview: Donation Analysis

Combine Data from multiple sources

- You are required to analyze donations across schools and cities in US
- As part of this project your emphasis will be on understanding the Data Flow capabilities
- You will use the two files given as part of the project to create data-sets

Extras (beyond Donation Analysis)

- You will see how we could move data between two relational sources using Data Flow
- You will learn to leverage Data Flow for Sentiment Analysis

Create your Target Data-Set

Combine Raw Data and Aggregate



Section 3: Data Flow Deep Dive with Oracle Analytics

Create your first Data Flow

Is your data-set ready for analysis ?

- Data Flow helps you keep source Data Set unchanged and create a new project specific output
- Typical workflow to create curated Data Set with Data Flow
 - Use filters to limit the amount of data to be included in the data flow output
 - Add Columns to include data required for analysis
 - Add new Data Set to extend the dimensionality/facts of existing data
 - Select Columns to focus on relevant attributes of data
 - Aggregate data to “group-by” and create summary data
 - Rename Columns to give business meaning to metadata

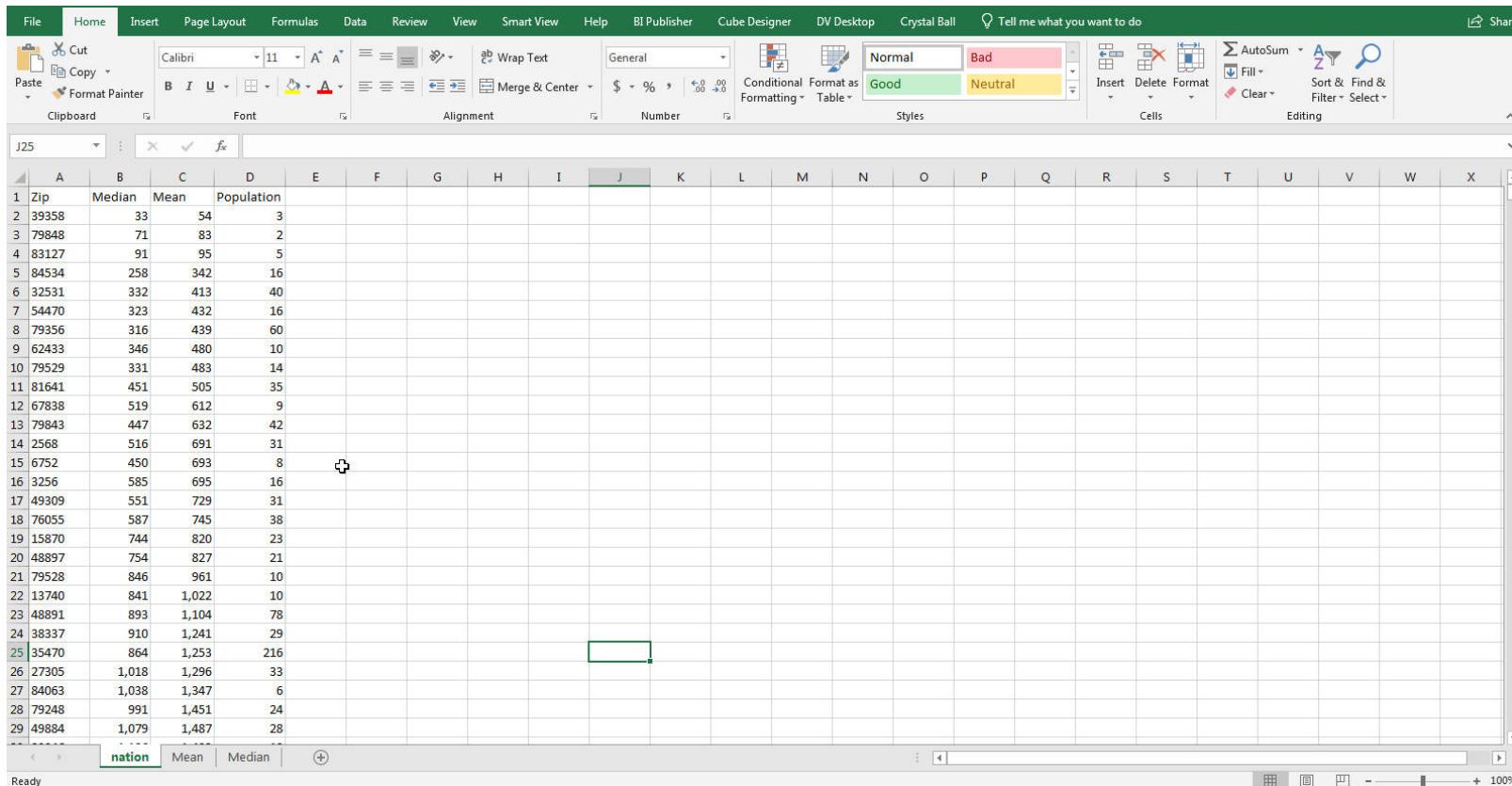
Assignment Screens: Create your first Data Flow

| PROJECTID | TEACHER_A | SCHOOL_ID | SCH_LATIT | SCH_LONGI | SCH_CITY | ZIP | SCH_STATE | SCH_METR | SCH_COUN | SCH_CHAR | TCHR_PREF | TCHR_TEAC | PRIMARY_F | PRIMARY_F | SECONDAR | SECONDAR | OCUS_OCUS | OCUS_OCUS | ARE_Y_FOCUS_A | Y_FOCUS_B | RESOURCE | POVERTY_L | GRADE_L | STUDENTS | TOTAL_DON | NUM_DONORS | PACT_MAT | FUNDING_DA | ELIGIBLE_D | DOUBLE_IM | STATUS_ED |
|-----------|---------------------|-----------|-----------|-------------|----------|----------|------------|----------|----------|----------|-----------------------------|-----------------------|----------------------|-------------------|------------|------------|-----------|-----------|---------------|-----------|----------|-----------|---------|----------|-----------|------------|----------|------------|------------|-----------|-----------|
| P100000 | c613d9f2df5a1953a | 35.17894 | -80.7679 | Charlotte | NC-28212 | urban | Mecklenb | f | Mrs. | f | Health & Math & Sc Literacy | Literacy & Technolog | D: Highest | C: Grades | | | 200 | 844.81 | 6 t | complete | 10 | | | | | | | | | | |
| P100001 | 19a38092f525e2e3d | 35.13882 | -89.9012 | Memphis | TN-38117 | urban | Shelby | f | Mrs. | t | Literacy | Literacy & Language | Books | D: Highest | A: Grades | | 20 | 180.37 | 7 t | complete | 10 | | | | | | | | | | |
| P100003 | 5b3fbcd2f57a2826a | 41.93702 | -72.795 | Granby | CT-6035 | suburban | Hartford | f | Ms. | f | Literacy | Literacy & Language | Other | A: Low po | A: Grades | | 22 | 0 | 2 t | expired | 10 | | | | | | | | | | |
| P100005 | 26f737c8064c5221d | 29.87183 | -95.3363 | Houston | TX-77093 | urban | Harris | f | Ms. | f | Mathematic | Math & Sc Early Dev | Applied L | Supplies | D: Highest | A: Grades | | 25 | 368.18 | 2 t | complete | 10 | | | | | | | | | |
| P100006 | f0ba490ff3f465c77 | 28.07272 | -82.6316 | Tampa | FL-33626 | suburban | Hillsborou | f | Mrs. | f | Literacy | Literacy & Language | Supplies | A: Low po | A: Grades | | 18 | 254.92 | 7 t | complete | 10 | | | | | | | | | | |
| P100015 | 70a7954aaef6e0b57 | 35.03216 | -106.709 | Albuquerque | NM-87105 | suburban | Bernalillo | f | Mrs. | f | Early Dev | Applied L | Health & S | Supplies | D: Highest | A: Grades | | 22 | 511.89 | 13 f | complete | 10 | | | | | | | | | |
| P100016 | fed6745aa89f101b7 | 35.01014 | -90.0139 | Memphis | TN-38116 | urban | Shelby | f | Ms. | f | College & Applied L | Mathem | Math & Sc Supplies | D: Highest | C: Grades | | 140 | 559.92 | 36 t | complete | 11 | | | | | | | | | | |
| P100024 | 4ea3e80e0ebfffc783 | 25.89163 | -97.44 | Brownsville | TX-78521 | urban | Cameron | f | Mrs. | f | Literacy | Literacy & Language | Technolog | C: High po | B: Grades | | 600 | 481.59 | 2 t | complete | 11 | | | | | | | | | | |
| P10003 | 53fd9b1031842e4f5a | 46.14432 | -122.933 | Longview | WA-98632 | urban | Cowlitz | f | Mr. | f | Special N | Special N Literacy | Literacy & Books | C: High po | D: Grades | | 15 | 861.34 | 4 f | complete | 23 | | | | | | | | | | |
| P10004 | bfcfcba82a66447a03 | 42.48574 | -83.074 | Warren | MI-48091 | urban | Macomb | f | Ms. | f | Literacy | Literacy & ESL | Literacy & Technolog | C: High po | B: Grades | | 22 | 0 | 0 f | expired | 23 | | | | | | | | | | |
| P100048 | 876e08cd667b31bb | 27.96603 | -82.2755 | Seffner | FL-33584 | suburban | Hillsborou | f | Ms. | f | Special N | Special N Literacy | Literacy & Supplies | C: High po | B: Grades | | 14 | 0 | 3 t | expired | 11 | | | | | | | | | | |
| P100049 | 27a276ff9d700c50d | 36.18383 | -115.221 | Las Vegas | NV-89108 | urban | Clark | f | Ms. | f | Literacy | Literacy & Visual Art | Music & TI | Technolog | D: Highest | A: Grades | | 20 | 1488.75 | 3 t | complete | 11 | | | | | | | | | |
| P100053 | de216a13277565a | 36.9272 | -121.752 | Watsonville | CA-95076 | urban | Santa Cruz | f | Ms. | t | Special N | Special N Literature | Literacy & Supplies | D: Highest | B: Grades | | 45 | 0 | 0 f | expired | 11 | | | | | | | | | | |
| P100057 | ec3fa226298986041 | 40.17711 | -79.8657 | Donora | PA-15033 | suburban | Washington | f | Ms. | f | Mathematical | Math & Sc History | & History | Technology | D: Highest | B: Grades | | 180 | 485.15 | 9 f | complete | 11 | | | | | | | | | |
| P100059 | bc4150905f76f0cd30 | 34.03297 | -117.798 | Diamond | CA-91765 | suburban | Los Angel | f | Mrs. | f | Health & Math | & Sc Environment | Math & Sc Supplies | B: Moderate | A: Grades | | 24 | 0 | 1 t | expired | 11 | | | | | | | | | | |
| P100064 | c08ba265c1542be34 | 31.97775 | -81.1057 | Savannah | GA-31406 | urban | Chathani | f | Mrs. | f | Applied S | Math & Science | Supplies | B: Moderate | B: Grades | | 32 | 0 | 0 t | expired | 11 | | | | | | | | | | |
| P100066 | e8f376f06b672a9e | 38.97851 | -78.3672 | Strasburg | VA-22657 | rural | Shenando | f | Ms. | f | Mathematical | Math & Science | Technolog | B: Moderate | C: Grades | | 65 | 365.75 | 2 t | complete | 11 | | | | | | | | | | |
| P100068 | e655d1c9111337ed | 38.8314 | -90.3135 | Florissant | MO-63031 | suburban | St Louis | f | Mrs. | f | Visual Art | Music & The Arts | Other | C: High po | D: Grades | | 500 | 286.72 | 3 t | complete | 11 | | | | | | | | | | |
| P100069 | 7ae054f8824bc5bb9 | 37.00798 | -121.585 | Gilroy | CA-95020 | suburban | Santa Clar | f | Mrs. | f | Sports | Health & Gym | & Fit | Health & Supplies | D: Highest | A: Grades | | 40 | 0 | 0 f | expired | 11 | | | | | | | | | |
| P10007 | 6d869a1c1fe8481c | 35.98739 | -86.5077 | Smryna | TN-37167 | suburban | Rutherford | f | Mr. | f | Literacy | Literacy & Language | Books | D: Highest | B: Grades | | 20 | 0 | 0 f | expired | 23 | | | | | | | | | | |
| P100074 | 63d0576ef41c88fab | 33.58027 | -81.6901 | Aiken | SC-29801 | suburban | Aiken | f | Mrs. | f | Literacy | Literacy & Literature | Literacy & Supplies | D: Highest | A: Grades | | 16 | 549.07 | 10 f | complete | 11 | | | | | | | | | | |
| P100073 | 4e4bd32b98cb74f | 40.29669 | -109.996 | Roosevelt | UT-84066 | rural | Duchesne | f | Mrs. | f | Performin | Music & TI | Music | Music & TI | Technolog | C: High po | C: Grades | | 130 | 0 | 4 f | expired | 11 | | | | | | | | |
| P100078 | 355acc6d784ad2745 | 33.92292 | -118.274 | Los Angel | CA-90061 | urban | Los Angel | f | Mr. | f | Foreign L | Literacy & Performin | Music & TI | Music & TI | Technolog | D: Highest | D: Grades | | 87 | 938.92 | 28 f | complete | 11 | | | | | | | | |
| P100083 | b7154fd8c5866ed7c | 35.24248 | -81.1282 | Gastonia | NC-28054 | urban | Gaston | f | Mrs. | f | Literacy | Literacy & ESL | Literacy & Books | C: High po | D: Grades | | 50 | 395.21 | 4 t | complete | 11 | | | | | | | | | | |
| P100101 | 3d311d6339279f9e6f | 33.99029 | -118.226 | Huntington | CA-90255 | suburban | Los Angel | f | Mrs. | f | Literacy | Literacy & Literature | Literacy & Technolog | C: High po | D: Grades | | 329 | 228.11 | 3 f | complete | 11 | | | | | | | | | | |
| P100102 | bc7f71a1939279f9e6f | 33.99029 | -118.226 | Huntington | CA-90255 | suburban | Los Angel | f | Mr. | f | Foreign L | Literacy & Language | Books | C: High po | D: Grades | | 130 | 0 | 0 f | expired | 11 | | | | | | | | | | |

Lets open review the dataset
“Donation_Example.xlsx”

The data set we have is good for an analysis of donations, by various attributes like school, subjects, projects, states, etc. However if you want to extend the analysis by the state demographics like Income and population, the same is not available

Assignment Screens: Create your first Data Flow



The screenshot shows a Microsoft Excel spreadsheet titled "Zip_Stats". The data is organized into four columns: Zip, Median, Mean, and Population. The Zip column contains various zip codes, while the other three columns provide demographic statistics for each. The Excel ribbon at the top includes tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Smart View, Help, BI Publisher, Cube Designer, DV Desktop, Crystal Ball, and a search bar. The Home tab is selected. The ribbon also features various font and style tools, a conditional formatting section with color-coded categories (Normal, Bad, Good, Neutral), and a range of data analysis functions like AutoSum, Sort & Filter, and Find & Select.

| Zip | Median | Mean | Population |
|-------|--------|-------|------------|
| 39358 | 33 | 54 | 3 |
| 79848 | 71 | 83 | 2 |
| 83127 | 91 | 95 | 5 |
| 84534 | 258 | 342 | 16 |
| 32531 | 332 | 413 | 40 |
| 54470 | 323 | 432 | 16 |
| 79356 | 316 | 439 | 60 |
| 62433 | 346 | 480 | 10 |
| 79529 | 331 | 483 | 14 |
| 81641 | 451 | 505 | 35 |
| 67838 | 519 | 612 | 9 |
| 79843 | 447 | 632 | 42 |
| 2568 | 516 | 691 | 31 |
| 6752 | 450 | 693 | 8 |
| 3256 | 585 | 695 | 16 |
| 49309 | 551 | 729 | 31 |
| 76055 | 587 | 745 | 38 |
| 15870 | 744 | 820 | 23 |
| 48897 | 754 | 827 | 21 |
| 79528 | 846 | 961 | 10 |
| 13740 | 841 | 1,022 | 10 |
| 48891 | 893 | 1,104 | 78 |
| 38337 | 910 | 1,241 | 29 |
| 35470 | 864 | 1,253 | 216 |
| 27305 | 1,018 | 1,296 | 33 |
| 84063 | 1,038 | 1,347 | 6 |
| 79248 | 991 | 1,451 | 24 |
| 49884 | 1,079 | 1,487 | 28 |

Lets also open and review the data set "Zip_Stats"

This data set, has the required demographics information, you were looking for to extend your analysis with.

So lets use the data flow features to solve the business problem.

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud home screen. At the top right, there is a 'Create' button with a red box around it. A dropdown menu is open from this button, showing several options: 'Project' (selected), 'Data Set', 'Sequence', 'Connection', 'Data Replication', and 'Replication Connection'. Another red box highlights the 'Data Flow' option in the dropdown menu.

What are you interested in?

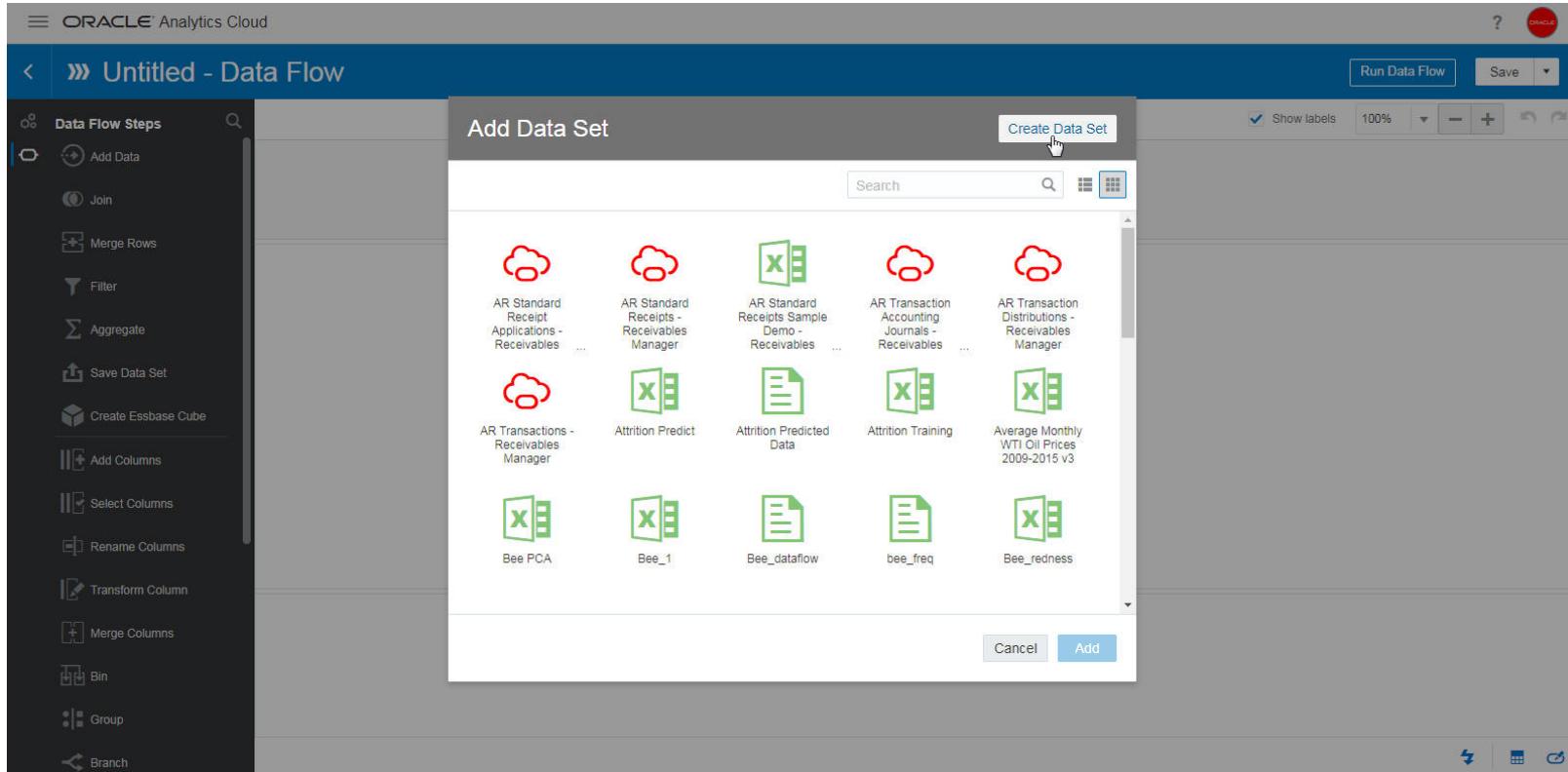
Home

What's New

- Channel Bill Date Pay Time
Online Full Range All
- Order Number, Bill Date, Paid Date, Pay Time
Order Number Bill Date Paid Date Pay Time
538526 01/01/2012 02/18/2012 48
538528 01/01/2012 02/02/2012 32
538531 01/01/2012 02/13/2012 43
538542 01/01/2012 02/13/2012 43
538543 01/01/2012 02/15/2012 45
538550 01/01/2012 02/18/2012 48
- Adaptive Performance... Project
EMEA version including WhatIf! lud:20190220
- Calc Issues Project
- pitest2 Project
- World_Tax File
Uploaded from World_Tax.xlsx.
- ST Income Group File
Uploaded from Tax_Conso3.xlsx.
- HR-Leavers File
Uploaded from HR-Leavers.xlsx.
- DV_SH_VIEW Database
External Data Set
- Data Set LC File
Uploaded from PCW15 F Sales.xlsx.
- F Sales File
Uploaded from PCW15 D Items.xlsx.
- D Items - LC File
Uploaded from PCW15 D Items.xlsx.
- HKLINEORDER Database
External Data Set

From the home screen, click "Create" -> "Data Flow"

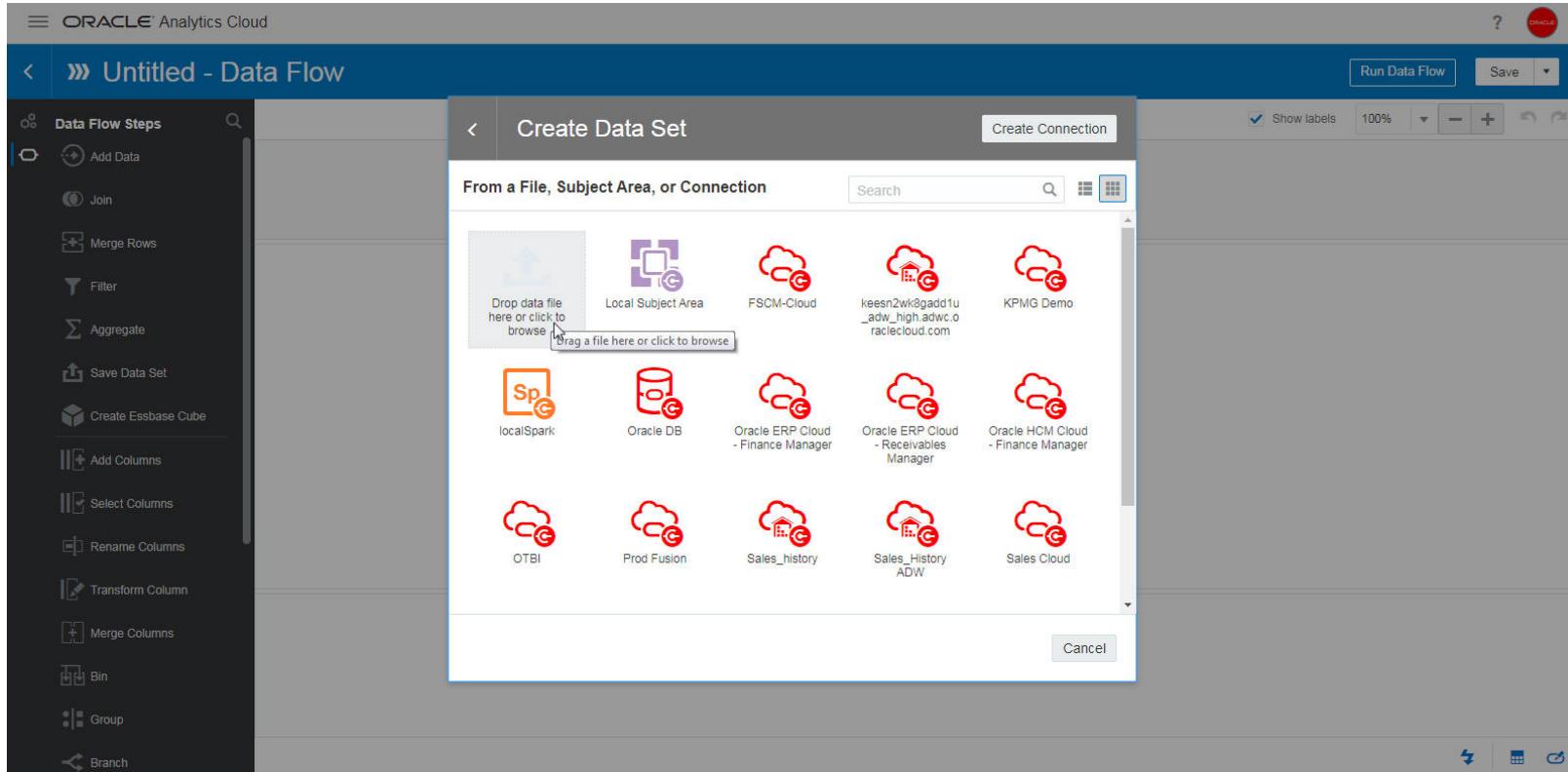
Assignment Screens: Create your first Data Flow



A data flow begins with a Data Set. This Data Set could be an existing Data Set in your environment. In this case you choose to Create a new Data Set.

On the “Add Data Set” window, click on “Create Data Set”

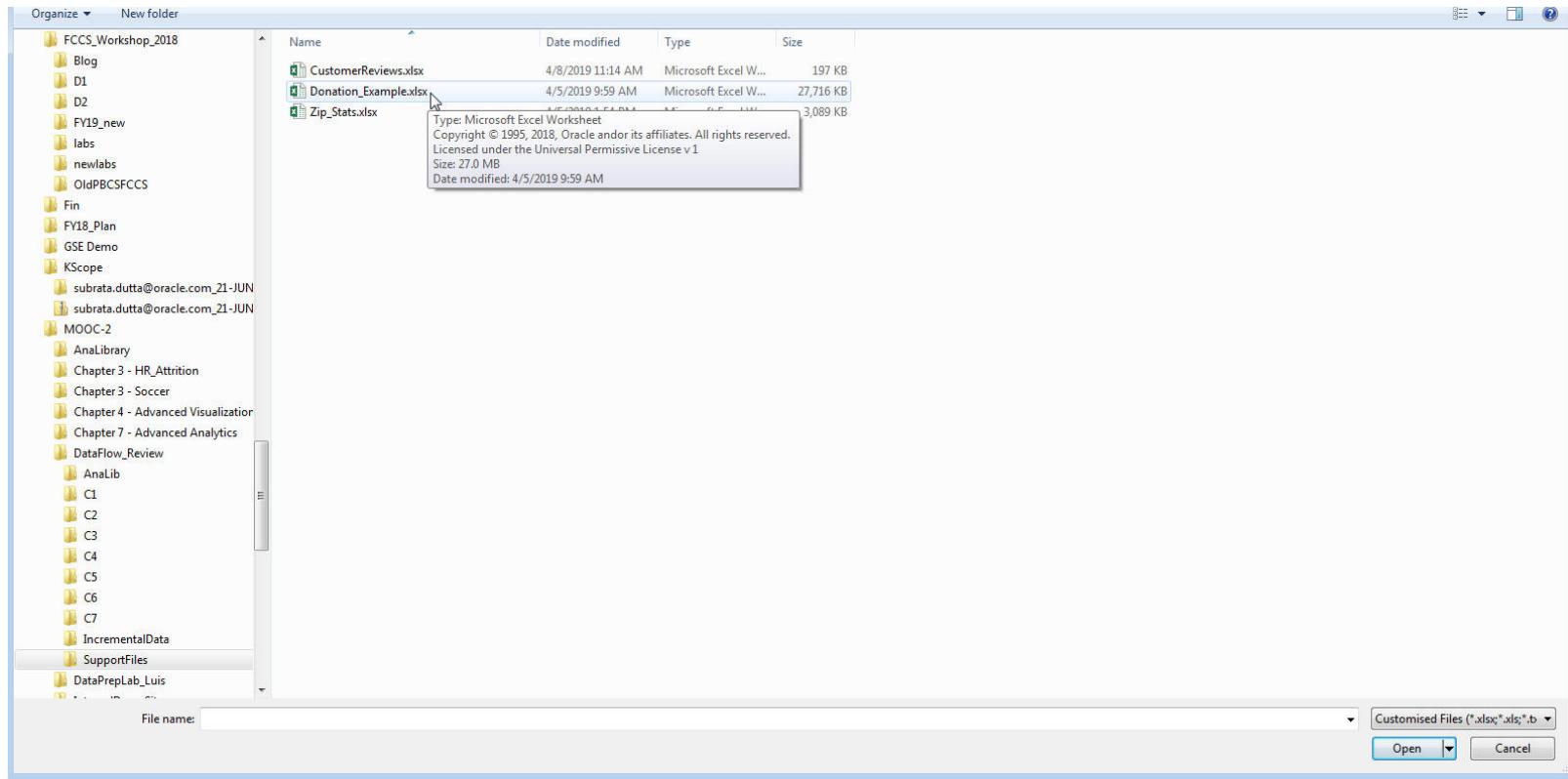
Assignment Screens: Create your first Data Flow



You could chose to leverage an established connection to extract data, or load a data file.

You need to load a file, lets click on the “Upload Icon”

Assignment Screens: Create your first Data Flow



You browse to your local machine folder, where you have your file.

Select “Donation_Example.xlsx”
and click “Open”

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud interface for creating a Data Flow. The main title is "Donation_Example - Data Flow". On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The "Add Data" step is currently selected. The main panel displays the following details:

- Name: Donation_Example
- Description: Uploaded from Donation_Example.xlsx.
- Owner: Admin
- Created: In Progress
- Modified: In Progress
- Uploaded File: Donation_Example.xlsx
- Sheet: Data
- Refreshed: Never

A large table below shows data from the uploaded Excel file. The columns are:

| PROJECTID | TEACHER_ACCTID | SCHOOL_ID | SCH_LATITUDE | SCH_LONGITUDE | SCH_CITY | SCH_STATEZIP | SCH_METR |
|-----------|-----------------------------------|----------------------------------|--------------|---------------|-------------|--------------|----------|
| P100000 | c613d9f2d60fdb26e488e6a258ec325d | f5a61953a1bc349d554e0bcc359eb99 | 35.178940 | -80.767916 | Charlotte | NC-28212 | urban |
| P100001 | 19a38092f4bbcdbe20a2df508d7712d | 525e2e3deffda300279366bc0df741c | 35.138819 | -89.901170 | Memphis | TN-38117 | urban |
| P100003 | 5b3bcd26b5c906a6682595bd6045440 | 57a2826ad350c90461f3604381fd4b45 | 41.937016 | -72.794975 | Granby | CT-6035 | suburban |
| P100005 | 26f737c809a7d900db2edfc556796d28 | 64c5221dcdb140242da0695c1b85d5e9 | 29.871830 | -95.336273 | Houston | TX-77093 | urban |
| P100006 | fdba490ff18adf1606fc82aaaf8cb8fb3 | 3f465c77784430c574dabf000038ff16 | 28.072720 | -82.631622 | Tampa | FL-33626 | suburban |
| P100015 | 70a7954e2b102357bfcc60926194d5cf | f6efe0b57e00a85c3739ef29531fb5ec | 35.032159 | -106.709088 | Albuquerque | NM-87105 | suburban |
| P100019 | fed6745aa7c44c5d3ea0525637028137 | 89f101b7ccb50a12e2d49859df92ad2 | 35.010137 | -90.013897 | Memphis | TN-38116 | urban |
| P100024 | 4ea38e80ec1ce911ab7ab2aa737a7155 | cebbfc78345876407712393df0aae0a6 | 25.891631 | -97.440019 | Brownsville | TX-78521 | urban |
| P10003 | 53fd9b1035e5533b56621134a4c271d7 | 1842e4f5af07bb57a935a62cb1ebb934 | 46.144319 | -122.935037 | Longview | WA-98632 | urban |
| P10004 | bcfcba82a9e4f5b2f5fecf9f0e8c6dd6 | f66447a03e641f49471d4780e621ba0e | 42.485737 | -83.074036 | Warren | MI-48091 | urban |
| P100048 | 876e08cde0879ad2025181fb70c3868 | 667b31bb052e4f91a488ba27b77f7416 | 27.966026 | -82.275543 | Seffner | FL-33584 | suburban |

You click on “Add” to bring the file in as a Data Set and add it to the Data Flow”

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The title bar says "Donation_Example - Data Flow". On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, Branch, Cumulative Value, Time Series Forecast, Analyze Sentiment, Train Numeric Prediction, Train Multi-Classifier, Train Binary Classifier, Train Clustering, and Apply Model. A red box highlights the "Add Data" button in the toolbar. Below the toolbar is a table with columns: REACHED, 99 TOTAL_DONATIONS, 99 NUM_DONORS, ab ELIGIBLE_DOUBLE_IMPACT_MATCH, ab FUNDING_STATUS, ab DATE_POSTED, and DATE_COMPLETED. The DATE_COMPLETED column contains two rows: "03/20/2011" and "10.Feb.2011". A red box highlights the "DATE_COMPLETED" row.

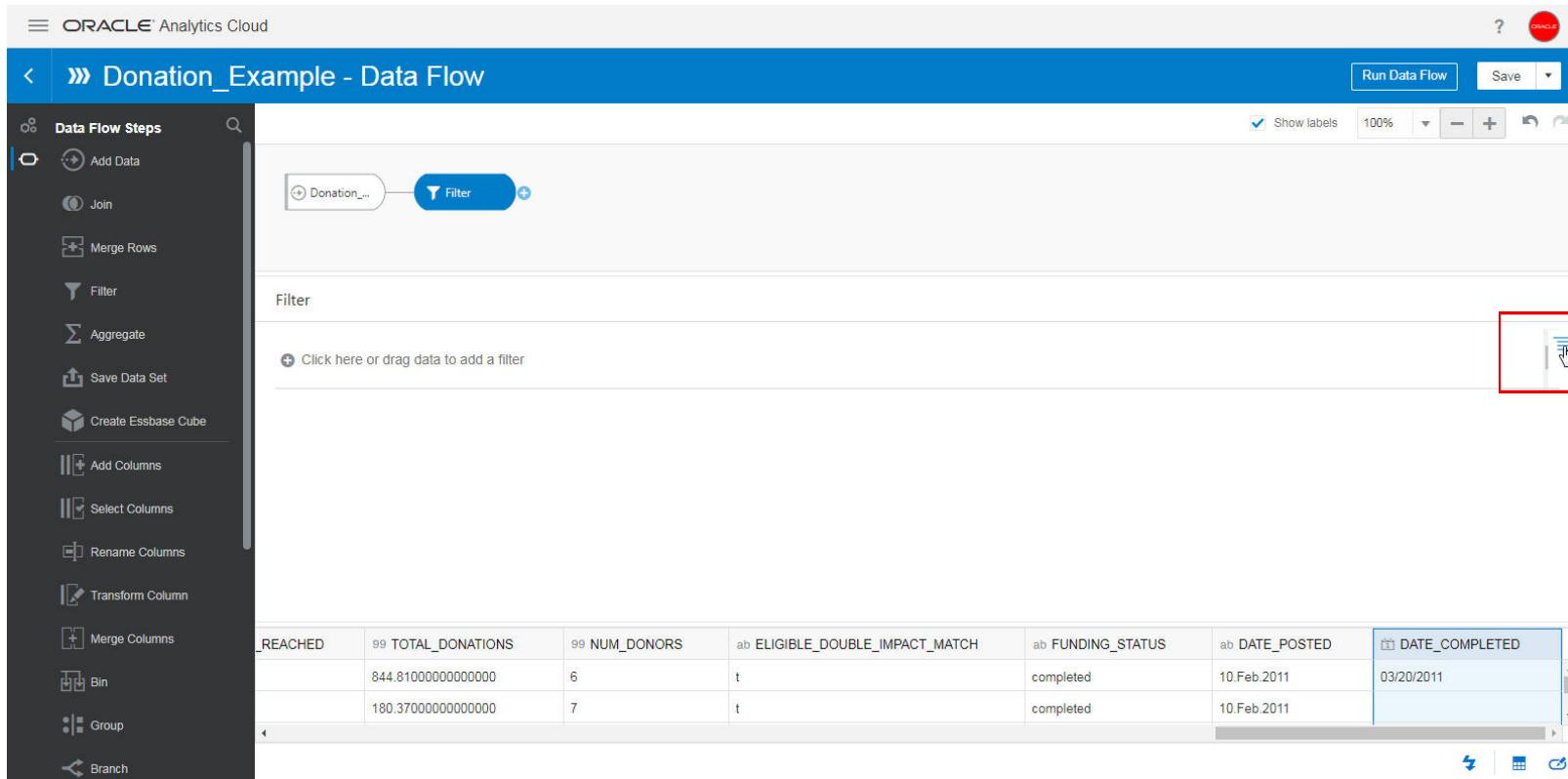
A Step in the Data Flow, is added.

You could choose to make the selection of data set dynamic, by setting up a prompt, which will be invoked while the data set is executed.

At this stage you browse thru the columns that is added, towards the end you see a “Date Completed” column. This has some “Null” values, you decide to do away with these records.

You add a step bu clicking on the “+” icon and select “Filter”

Assignment Screens: Create your first Data Flow



Click on “Menu” available in
“Step Editor”

Assignment Screens: Create your first Data Flow

Click “Add Expression Filter”

The screenshot shows the Oracle Analytics Cloud Data Flow interface. On the left, a sidebar titled "Data Flow Steps" lists various steps: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, and Group. The main workspace contains a "Donation_Example - Data Flow" step, which has a "Filter" step attached to it. Below the workspace is a "Filter" section with the instruction "Click here or drag data to add a filter". To the right of this section is a button labeled "Add Expression Filter...". The bottom of the screen shows a preview of a data table with columns: REACHED, 99 TOTAL_DONATIONS, 99 NUM_DONORS, ab ELIGIBLE_DOUBLE_IMPACT_MATCH, ab FUNDING_STATUS, ab DATE_POSTED, and DATE_COMPLETED. The URL at the bottom is 10.128.7.181/dv/ui/home.jsp?pageid=visualAnalyzer#.

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow Steps interface. On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace contains a 'Donation_Example - Data Flow' step. A 'Filter' step is connected to a 'Donation_Example' step. A modal window titled 'Filter' is open, showing a configuration for 'MyDateFilter'. The 'Label' field is set to 'MyDateFilter' and the 'Expression' field contains the formula 'DATE_COMPLETED is NOT NULL'. A green status bar at the bottom of the modal says 'Calculation validated'. Below the modal, there is a preview table with columns: RE, ab FUNDING_STATUS, ab DATE_POSTED, and DATE_COMPLETED. The preview shows two rows: one with 'completed' and '10.Feb.2011' in the first three columns, and another with 'completed' and '03/20/2011' in the first three columns. The 'DATE_COMPLETED' column has a blue selection bar.

In the Label enter
“MyDateFilter” and in Expression
Enter “DATE_COMPLETED is NOT
NULL”

Validate and then Apply

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace contains a flow diagram with a 'Donation_...' source node connected to a 'Filter' step. A context menu is open over the 'Filter' step, displaying icons for Add Data, Join, Merge Rows, Filter, Aggregate, Save Data, Create Essbase Cube, Add Columns (which is highlighted), Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, Branch, Cumulative Value, Time Series Forecast, Analyze Sentiment, Train Numeric Prediction, Train Multi-Classifier, Train Binary Classifier, Train Clustering, and Apply Model. Below the workspace is a preview table with columns: REACHED, 99 TOTAL_DONATIONS, 99 NUM_DONORS, ab ELIGIBLE_DOUBLE_IMPACT_MATCH, ab FUNDING_STATUS, ab DATE_POSTED, and DATE_COMPLETED. The DATE_COMPLETED column shows two rows: 03/20/2011 and 02/28/2011.

With this you get your relevant records.

Click “+” icon and select “Add Columns”

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow Steps interface. On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main area displays a data flow diagram with three nodes: 'Donation_Example' (blue rounded rectangle), 'Filter' (yellow rounded rectangle with a minus sign), and 'Add Columns' (blue rounded rectangle). A tooltip 'Donation_Example' is visible over the first node. Below the diagram, a section titled 'Add Columns' shows a table with one row. The first column is 'Column' and the second is 'Name'. The 'Name' column contains 'School State'. The 'Value' column contains the formula 'SUBSTRING(SCH_STATEZIP FROM 1 FOR 2)'. A green message box says 'Calculation validated'. Below the table are 'Validate' and 'Apply' buttons, with 'Apply' being highlighted with a cursor. To the right of the table is a search bar and a sidebar with sections like Operators, Aggregate, String, Math, and CalendarData.

For the Column Name enter
“School State”, in the editor
Enter “SUBSTRING(SCH_STATEZIP
FROM 1 FOR 2)”

Click “Validate” the “Apply”

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. At the top, there's a navigation bar with the title "Donation_Example - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a workflow starting with a "Donation..." source, followed by a "Filter" step, and then an "Add Columns" step. Below this, a "Add Columns" dialog is open. It shows a table with one row and two columns. The first column is labeled "Column" and contains "School State". The second column is labeled "Name" and contains "SUBSTRING(SCH_STATEZIP FROM 1 FOR 2)". A tooltip "f(x)" is shown above the second column. To the right of the table is a search bar and a list of functions: Operators, Aggregate, String, Math, and CalendarData. Below the table, there are "Validate" and "Apply" buttons. At the bottom of the workspace, there's a preview table with several columns: TOTAL_DONATIONS, NUM_DONORS, ELIGIBLE_DOUBLE_IMPACT_MATCH, FUNDING_STATUS, DATE_POSTED, DATE_COMPLETED, and School State. The preview shows two rows of data.

We need to add two more columns, below “Add Column”, click the “+” icon

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a flow diagram with a 'Donation_...' source, a 'Filter' step, and an 'Add Columns' step. Below the diagram, a 'Add Columns' panel is open. It shows a new column being created with the name 'School Zip' and the formula 'CAST(SUBSTRING(SCH_STATEZIP FROM 4) AS CHAR)'. A green message box indicates 'Calculation validated'. There is a 'Validate' button and an 'Apply' button with a cursor hovering over it. To the right of the validation message, there is a search bar and a list of functions: Operators, Aggregate, String, Math, and CalendarData. Below the search bar, it says 'Select a function to see description'. At the bottom of the workspace, there is a table with columns: TOTAL_DONATIONS, NUM_DONORS, ELIGIBLE_DOUBLE_IMPACT_MATCH, FUNDING_STATUS, DATE_POSTED, DATE_COMPLETED, and School State. Two rows of data are visible: one for North Carolina (NC) and one for Connecticut (CT).

For the Column Name enter
“School Zip”, in the editor Enter
“CAST
(SUBSTRING(SCH_STATEZIP
FROM 4) AS CHAR)”

Click “Validate” the “Apply”

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. At the top, there's a toolbar with 'Run Data Flow' and 'Save' buttons. Below it is a 'Data Flow Steps' sidebar with various icons for operations like Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a data flow diagram with three steps: 'Donation_...', 'Filter', and 'Add Columns'. The 'Add Columns' step is currently selected. Below the diagram is a 'Add Columns' dialog. In this dialog, a new column is being defined with the name 'School Zip' and the expression 'CAST(SUBSTRING(SCH_STATEZIP FROM 4) AS CHAR)'. A preview table shows two rows of data with columns: NUM_DONORS, ELIGIBLE_DOUBLE_IMPACT_MATCH, FUNDING_STATUS, DATE_POSTED, DATE_COMPLETED, School State, and School Zip. The 'School Zip' column is highlighted in orange.

Below “Add Column”, click the “+” icon

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow editor interface. On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a data flow diagram with a 'Donation...' source, a 'Filter' step, and an 'Add Columns' step. Below the diagram, a 'Add Columns' dialog is open. It shows a table with columns: 'Column', 'Name' (containing 'Yr Completed'), and 'Function' (containing 'Year(DATE_COMPLETED)'). A message 'Calculation validated' is displayed below the table. At the bottom right of the dialog is an 'Apply' button, which has a hand cursor over it, indicating it is clickable. To the right of the dialog is a search bar and a sidebar with categories like Operators, Aggregate, String, Math, and CalendarData.

For the Column Name enter “Yr Completed”, in the editor Enter “Year(DATE_COMPLETED)”

Click “Validate” the “Apply”

Assignment Screens: Create your first Data Flow

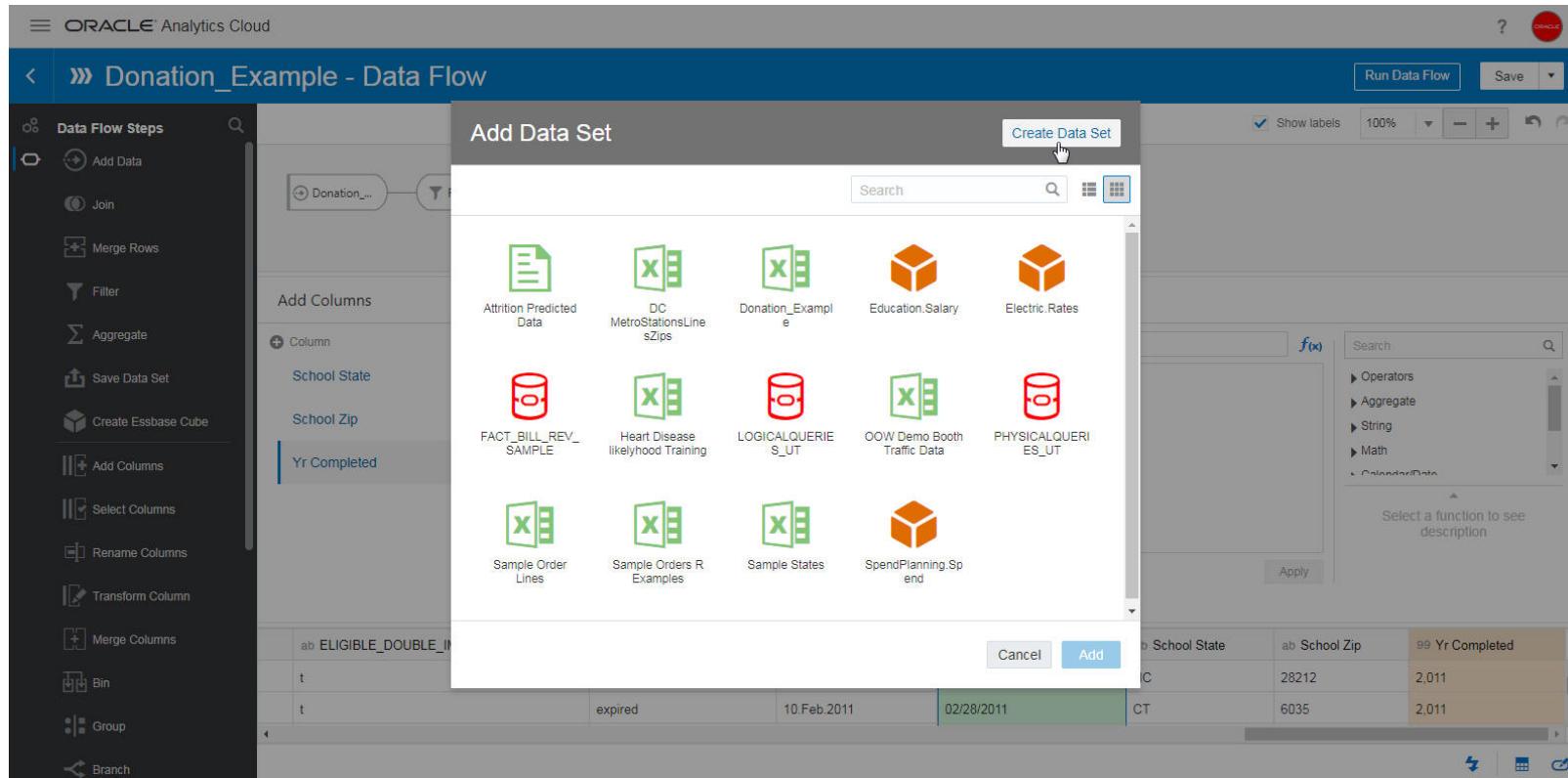
The screenshot shows the Oracle Analytics Cloud Data Flow Steps interface. On the left, a sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main area displays a flow diagram with nodes: 'Donation_...' (a rectangle), 'Filter' (a diamond), and 'Add Columns' (a rectangle). A context menu is open over the 'Add Columns' node, showing options like 'Add Data' (which is highlighted with a blue border), 'Join', 'Merge Rows', 'Filter', 'Aggregate', 'Save Data', and 'Create Essbase Cube'. Below the menu, there are sections for 'Add Columns' (with columns 'School State' and 'School Zip' and a new column 'Yr Completed'), 'Transform Column' (with icons for Branch, Cumulative Value, Time Series Forecast, Analyze Sentiment, Train Numeric Prediction, Train Multi-Classifier, Train Binary Classifier, Train Clustering, and Apply Model), and a search bar. At the bottom, a table shows data rows for 'ELIGIBLE_DOUBLE_IMPACT_MATCH', 'FUNDING_STATUS', 'DATE_POSTED', 'DATE_COMPLETED', 'School State', 'School Zip', and 'Yr Completed'.

We now want to combine the two data sets, to bring in the demographics data by zip code.

On the Flow Steps, click on the “+” icon, select “Add Data”

Assignment Screens: Create your first Data Flow

Click “Create Data Set”



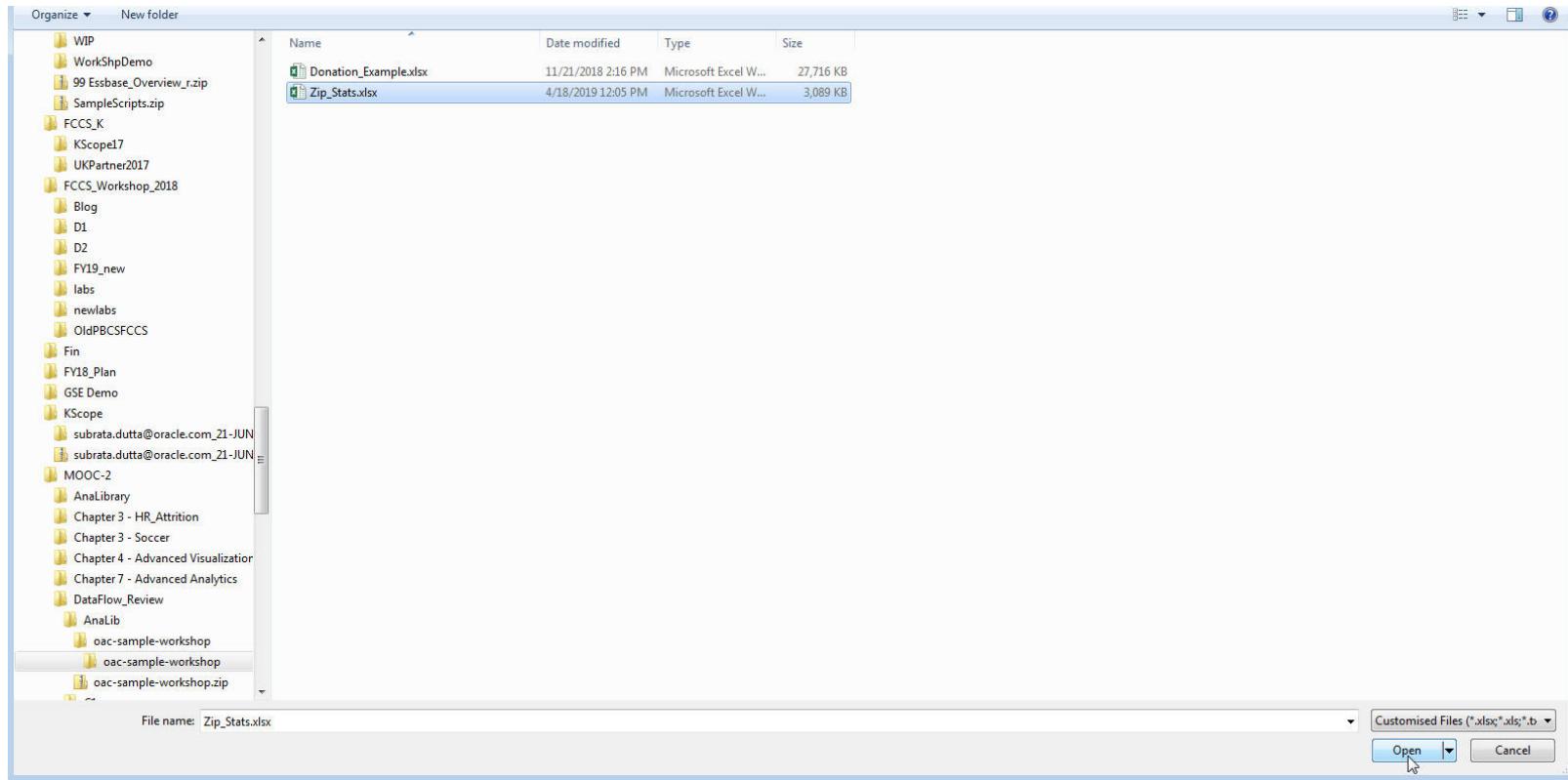
Assignment Screens: Create your first Data Flow

Click on the “Upload File” icon.

The screenshot shows the Oracle Analytics Cloud interface for creating a data set. The main window title is "Donation_Example - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The "Add Columns" section is currently selected, showing columns "School State", "School Zip", and "Yr Completed". A modal dialog titled "Create Data Set" is open, with the sub-section "From a File, Subject Area, or Connection". It contains a placeholder "Drop data file here or click to browse" and a "Drag a file here or click to browse" button. To the right of these are icons for "Local Subject Area", "localSpark", "Oracle DB", and "SampleEssbase". Below the dialog is a preview table with three rows:

| | School State | School Zip | Yr Completed |
|----|--------------|------------|--------------|
| C | 28212 | 2,011 | |
| CT | 6035 | 2,011 | |

Assignment Screens: Create your first Data Flow



Browse to the local machine folder, select the file “ZipStats.xlsx”, and click “Open”

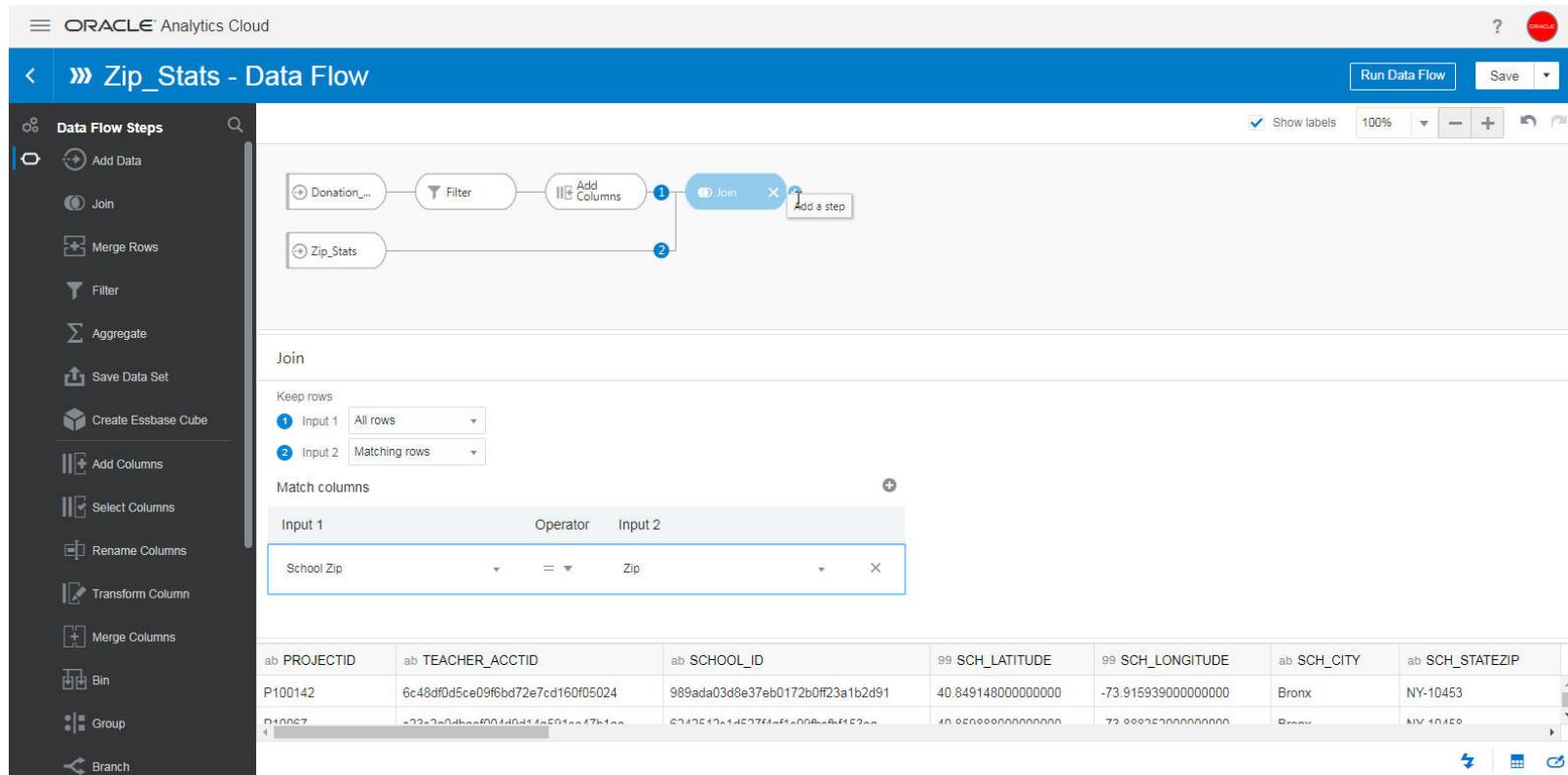
Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud interface for creating a Data Flow. The left sidebar lists various steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main area is titled "Zip_Stats - Data Flow". It displays a preview of the uploaded file "Zip_Stats.xlsx" with the sheet set to "nation". The preview table has columns: Zip, Median, Mean, Population. The data is as follows:

| Zip | Median | Mean | Population |
|-------|----------|----------|------------|
| 39358 | 32.9824 | 53.6160 | 3 |
| 79848 | 70.8026 | 82.8960 | 2 |
| 83127 | 90.9328 | 95.2528 | 5 |
| 84534 | 258.1440 | 342.0120 | 16 |
| 32531 | 331.8160 | 413.0600 | 40 |
| 54470 | 322.6993 | 431.6851 | 16 |
| 79356 | 316.1264 | 439.0306 | 60 |
| 62433 | 346.0700 | 479.6000 | 10 |
| 79529 | 331.4606 | 483.3327 | 14 |
| 81641 | 451.2053 | 504.5404 | 35 |
| 67838 | 518.7420 | 611.5148 | 9 |

Once you get the file preview,
Click on “Add”, to get the data set
into your environment and also
added to the Data Flow step.

Assignment Screens: Create your first Data Flow

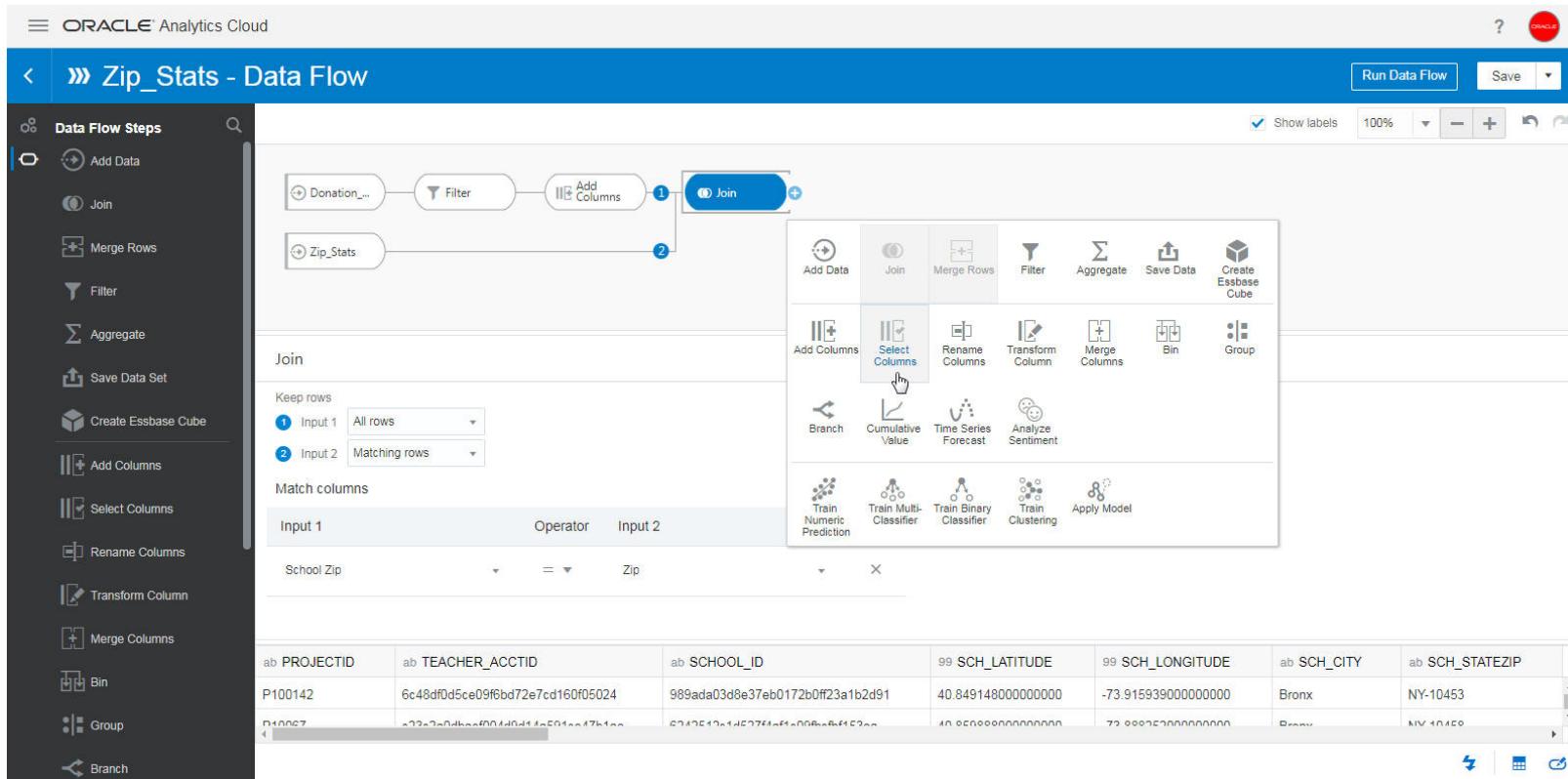


A Join step is added, to the data flow, Keep rows from the Input 1 file as “All rows”, as we want all records from the base file to be available, from input 2 we need all “Matching rows”.

In the Match columns, select the respective columns that define the Join, in Input 1, ensure it is “School Zip”, Operator is “=” and Input 2 is “Zip”

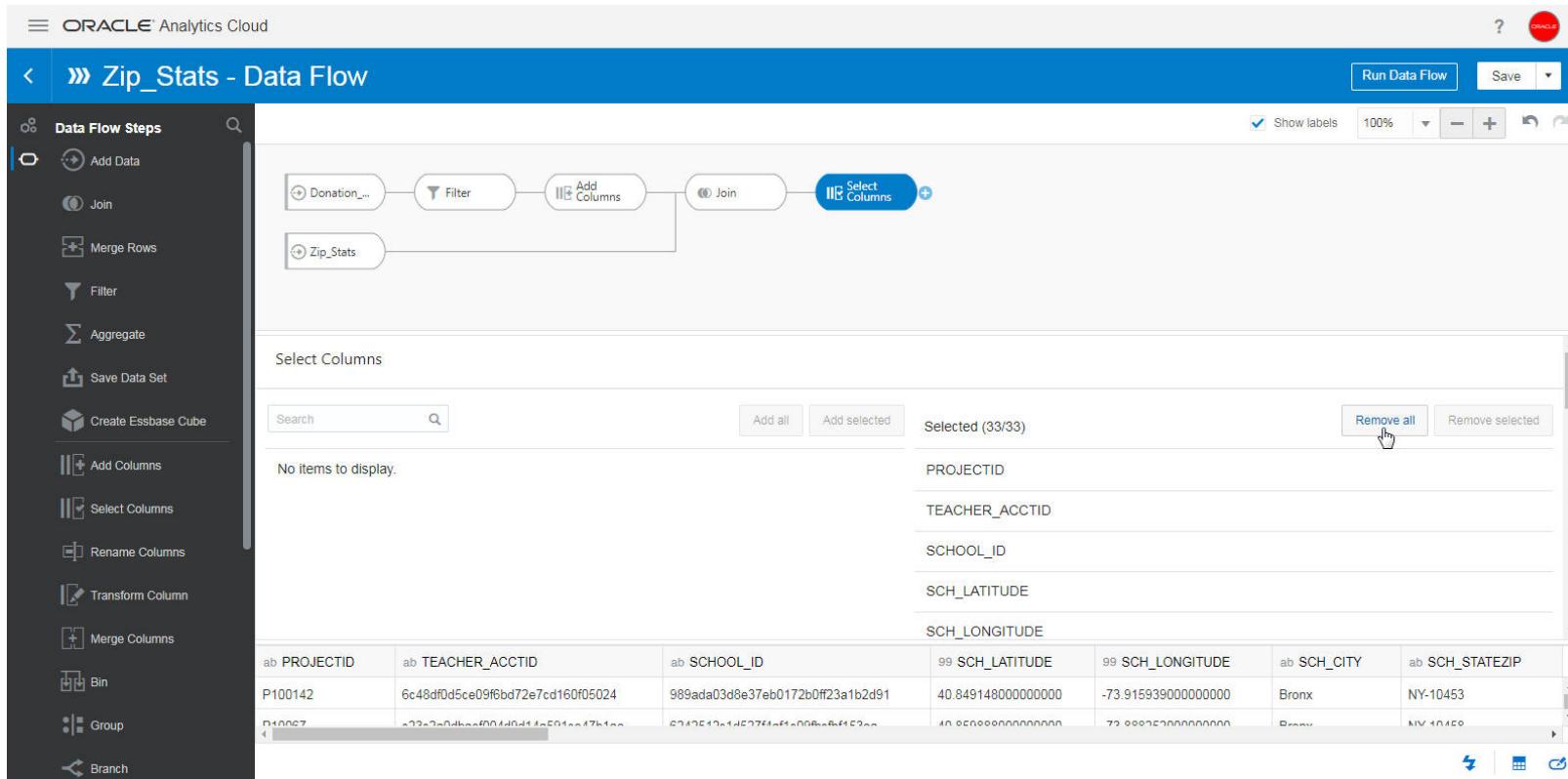
Next click on the “+” icon to add a step to the data flow

Assignment Screens: Create your first Data Flow



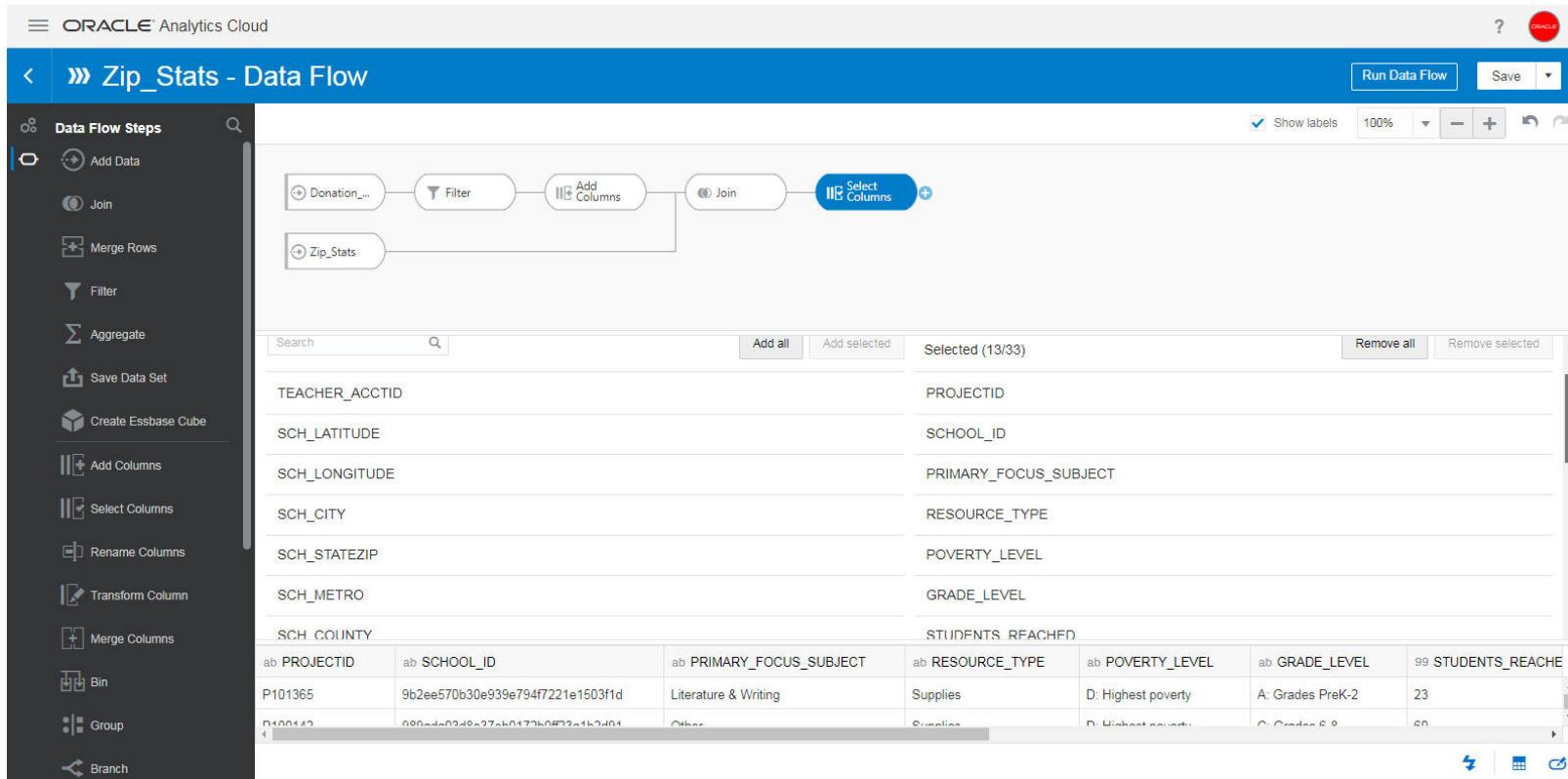
From the menu choose “Select Columns”

Assignment Screens: Create your first Data Flow



All Columns are selected by default, On your right, click , “Remove All”

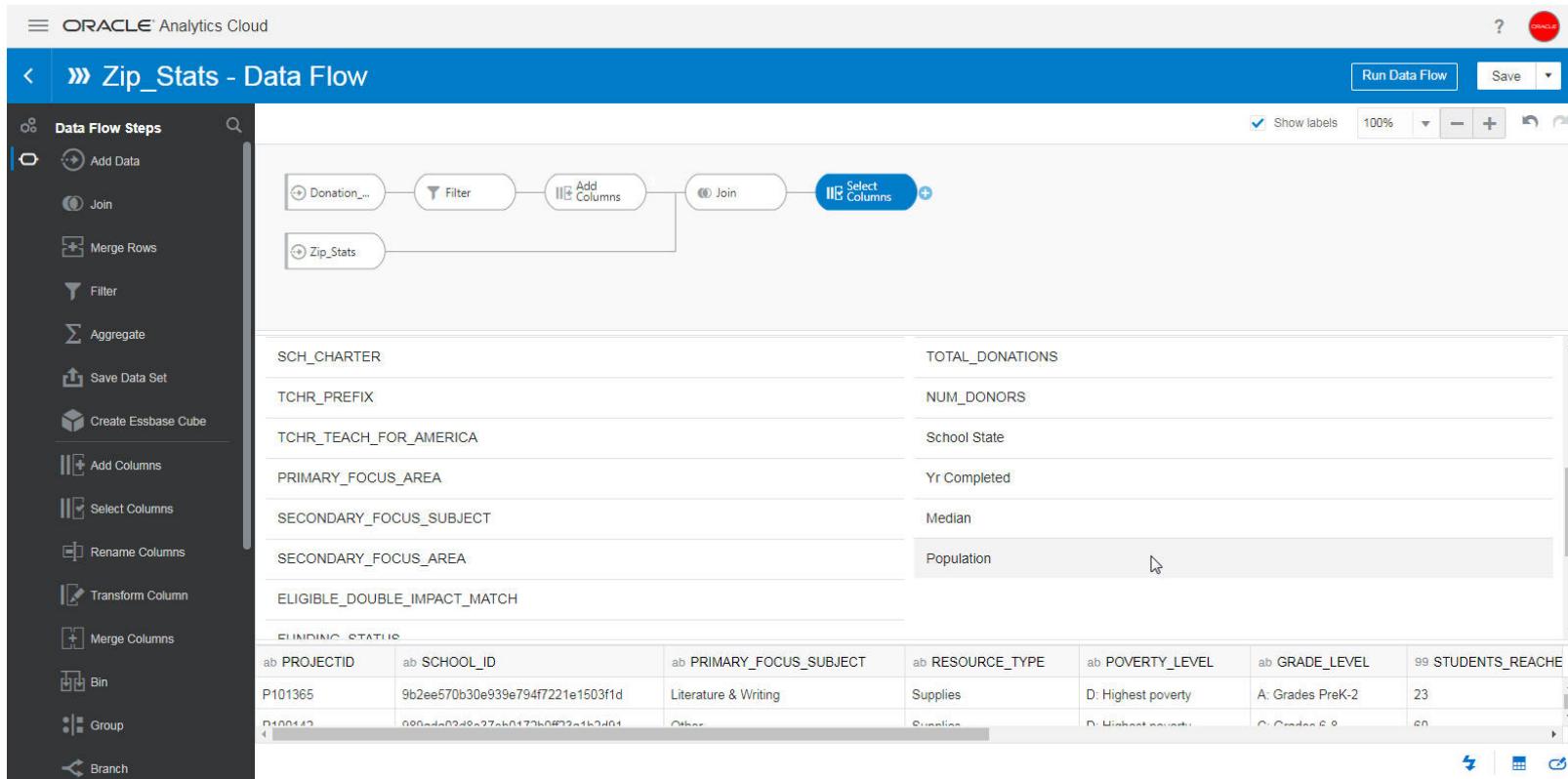
Assignment Screens: Create your first Data Flow



From you left, select the following columns

1. PROJECTID
 2. SCHOOL_ID
 3. PRIMARY_FOCUS_SUBJECT
 4. RESOURCE_TYPE
 5. POVERTY_LEVEL
 6. GRADE_LEVEL
 7. STUDENT_REACHED
-

Assignment Screens: Create your first Data Flow

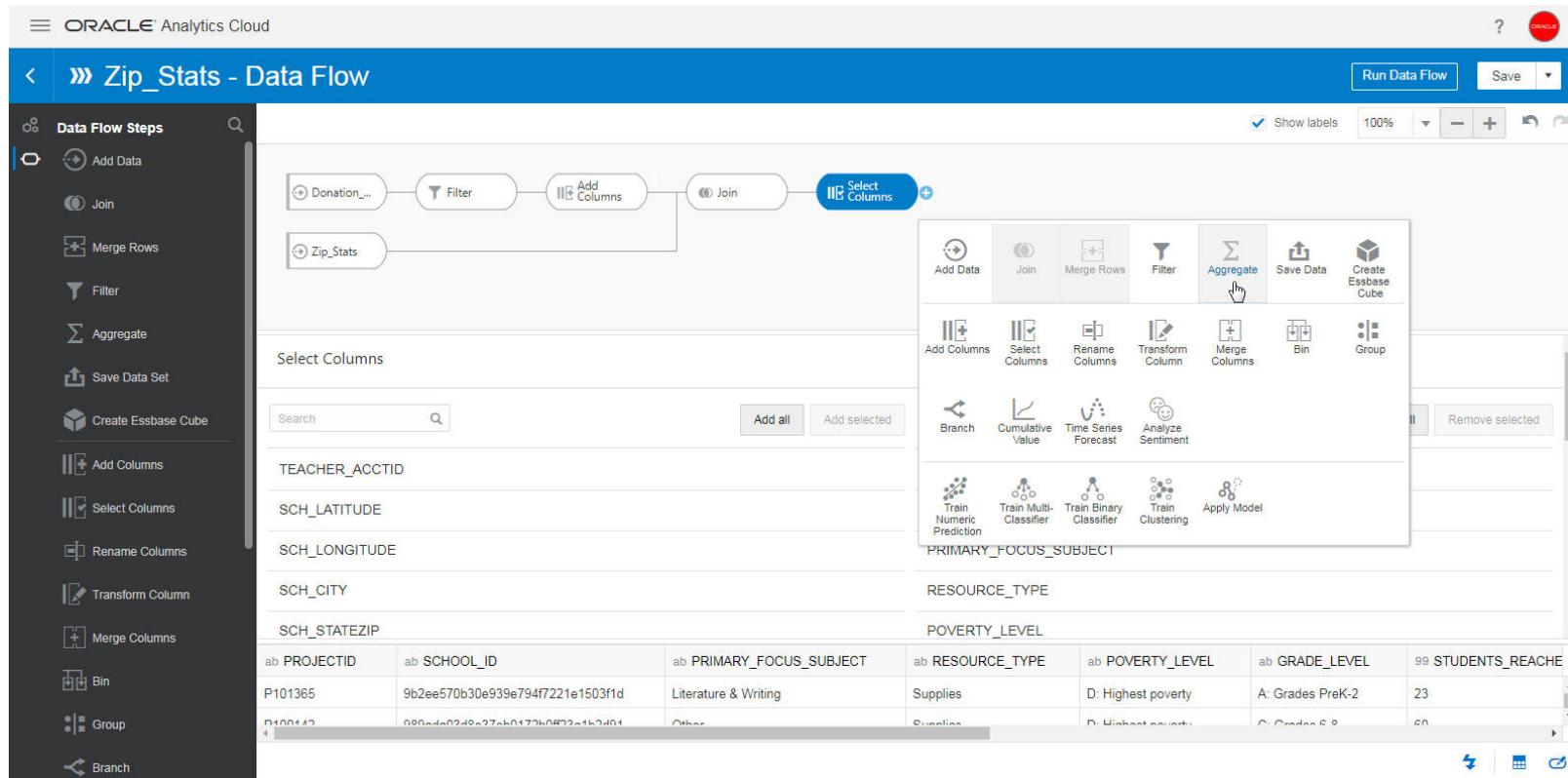


From you left, select the following columns

8. TOTAL_DONATIONS
9. NUM_DONORS
10. School State
11. Yr Completed
12. Median
13. Population

and click “Add Selected”

Assignment Screens: Create your first Data Flow

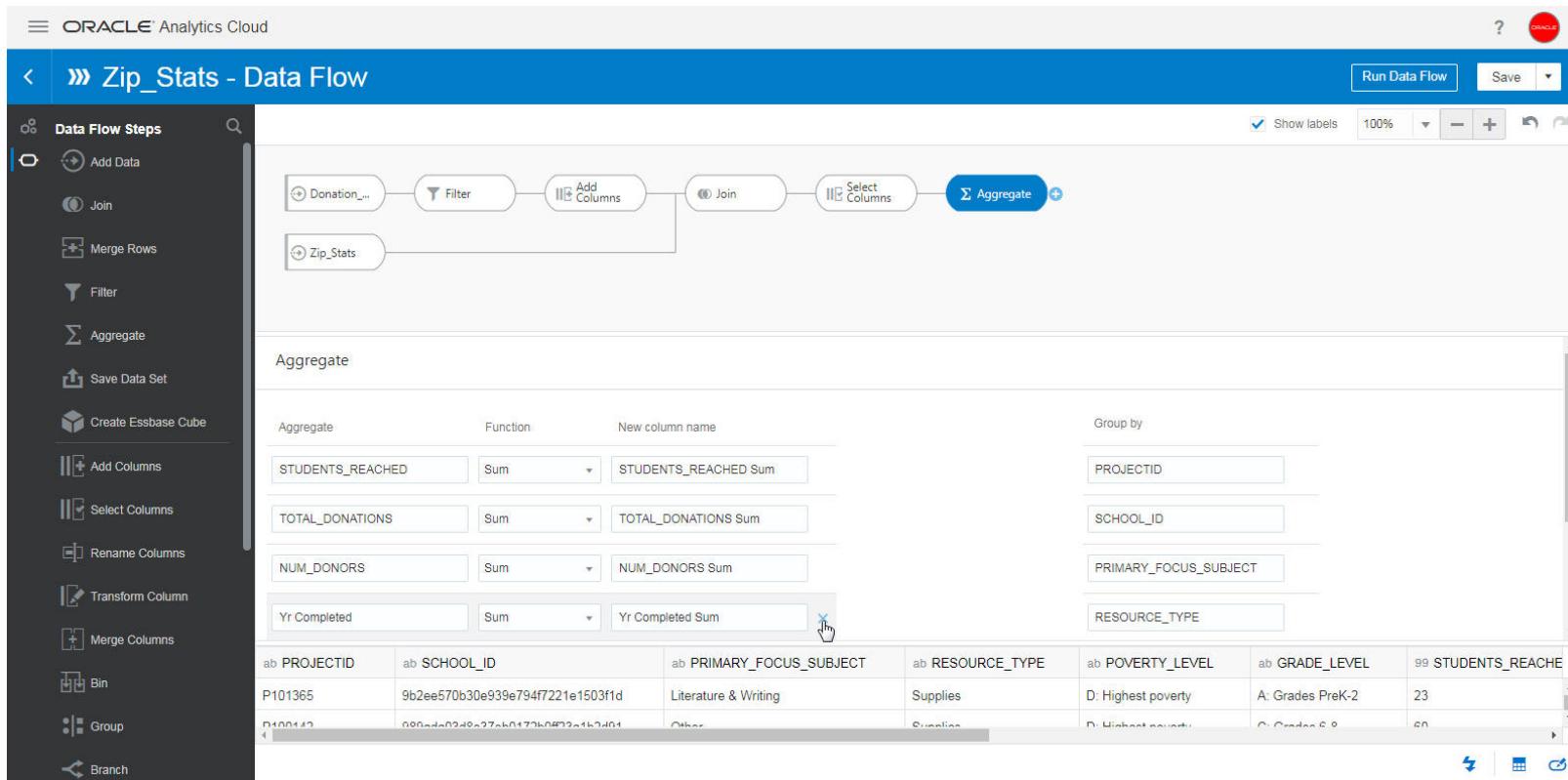


Lets now aggregate the data.

click on the “+” icon to add a step to the data flow

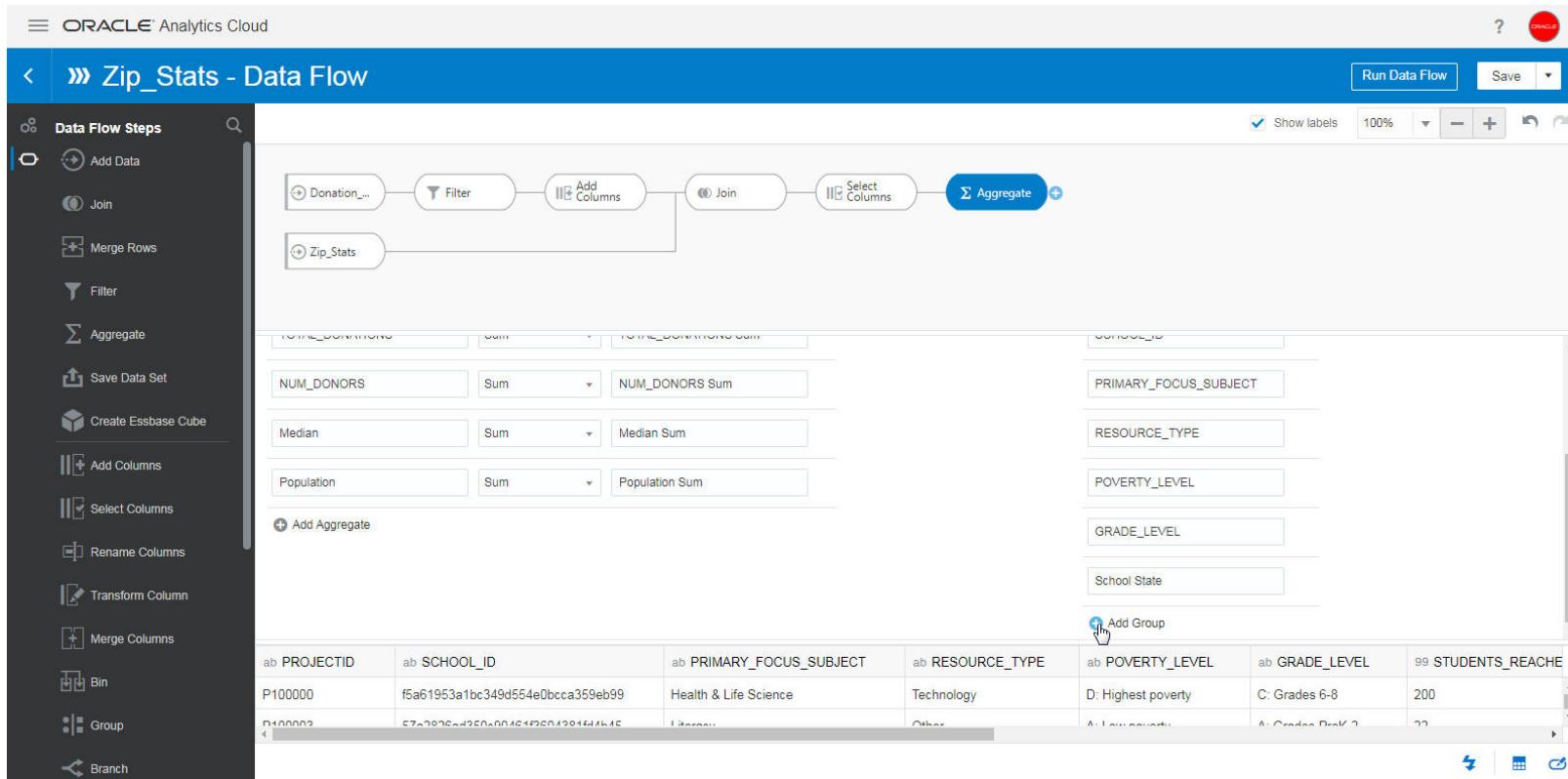
From the menu, select
“Aggregate”

Assignment Screens: Create your first Data Flow



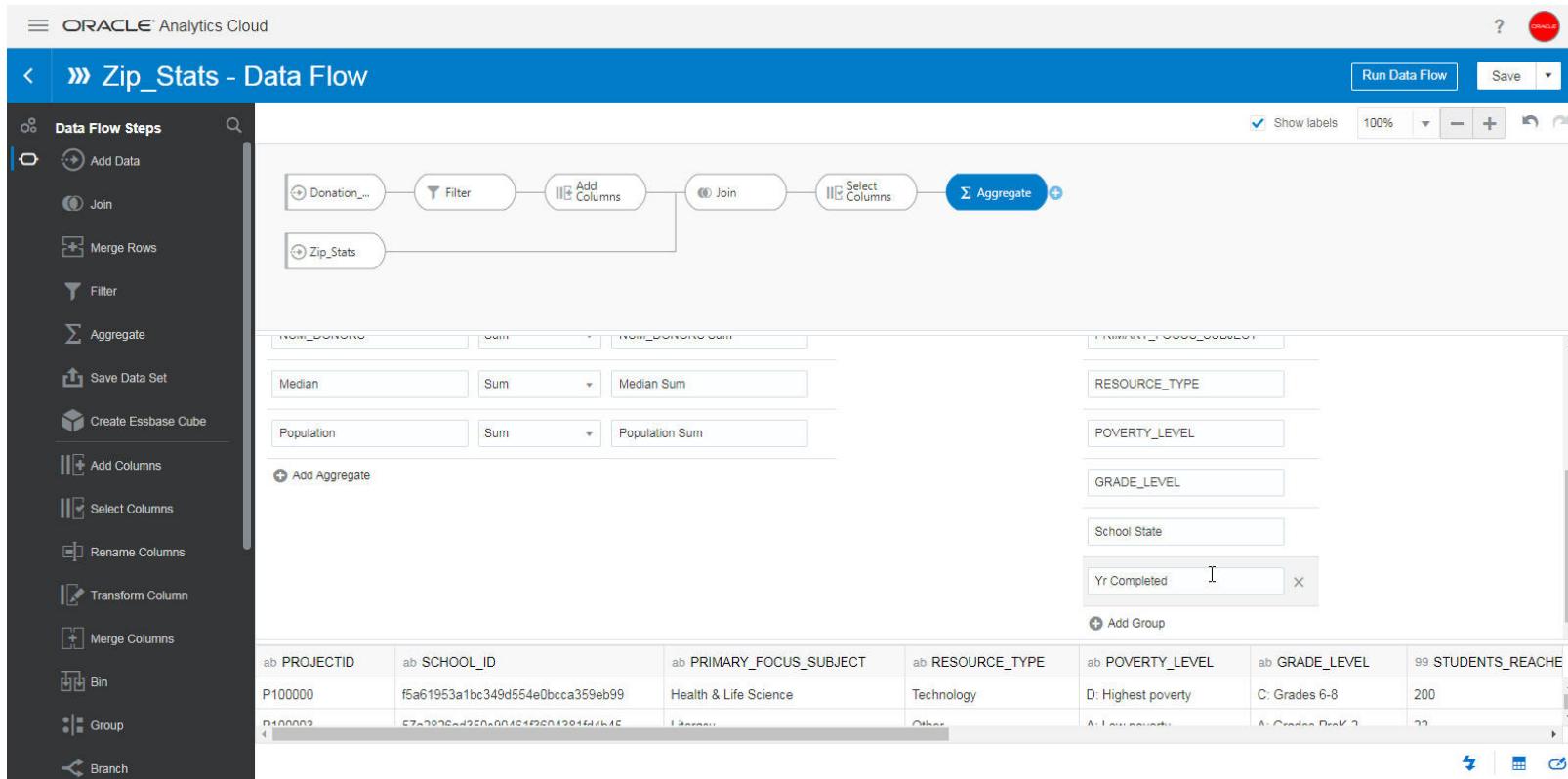
From the “Aggregate”, remove
“Yr Completed”

Assignment Screens: Create your first Data Flow



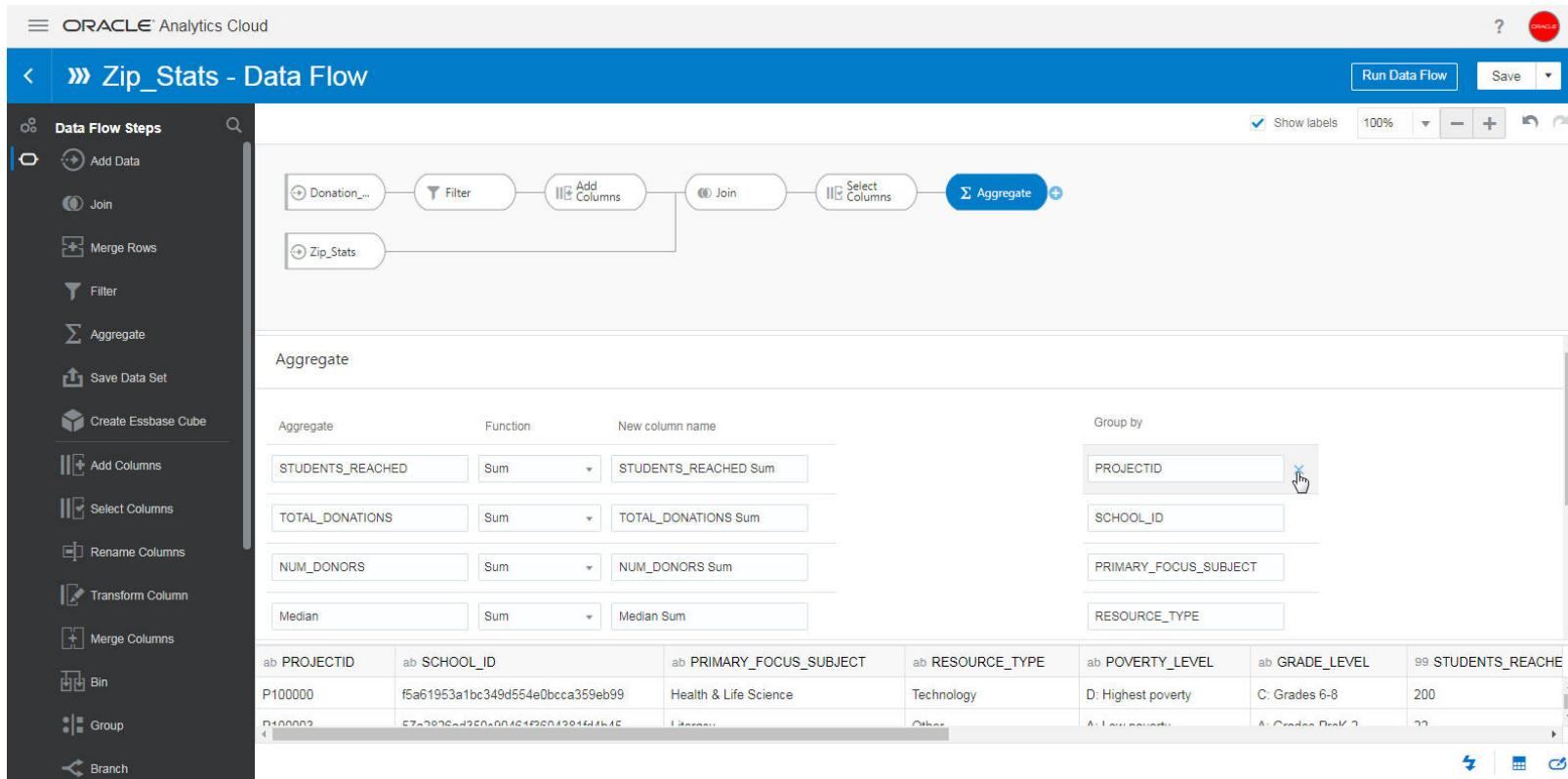
On the Groups, scroll below, click on “+” icon, “Add Group”

Assignment Screens: Create your first Data Flow



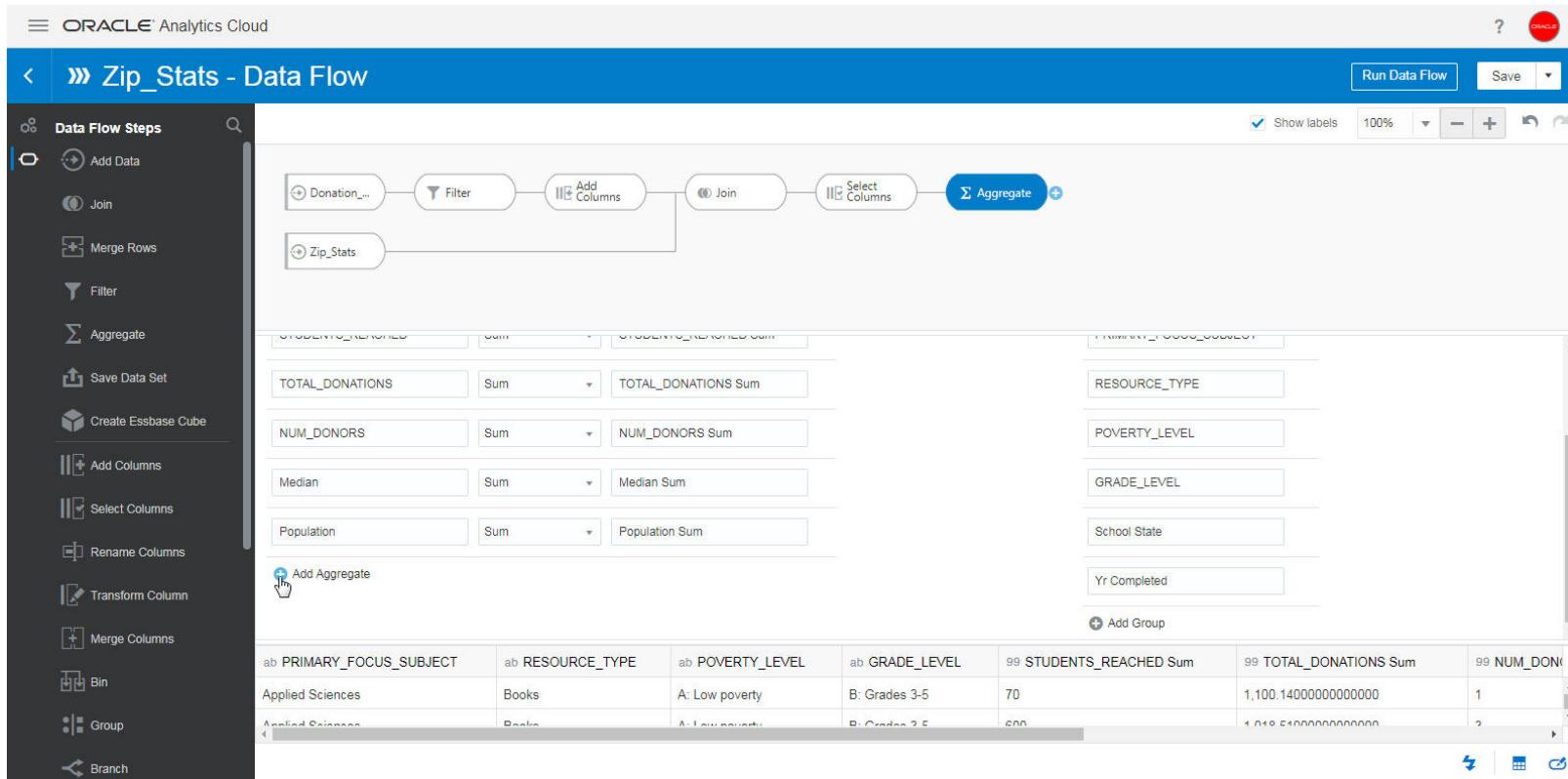
Select the “Yr Completed” column for Group By

Assignment Screens: Create your first Data Flow



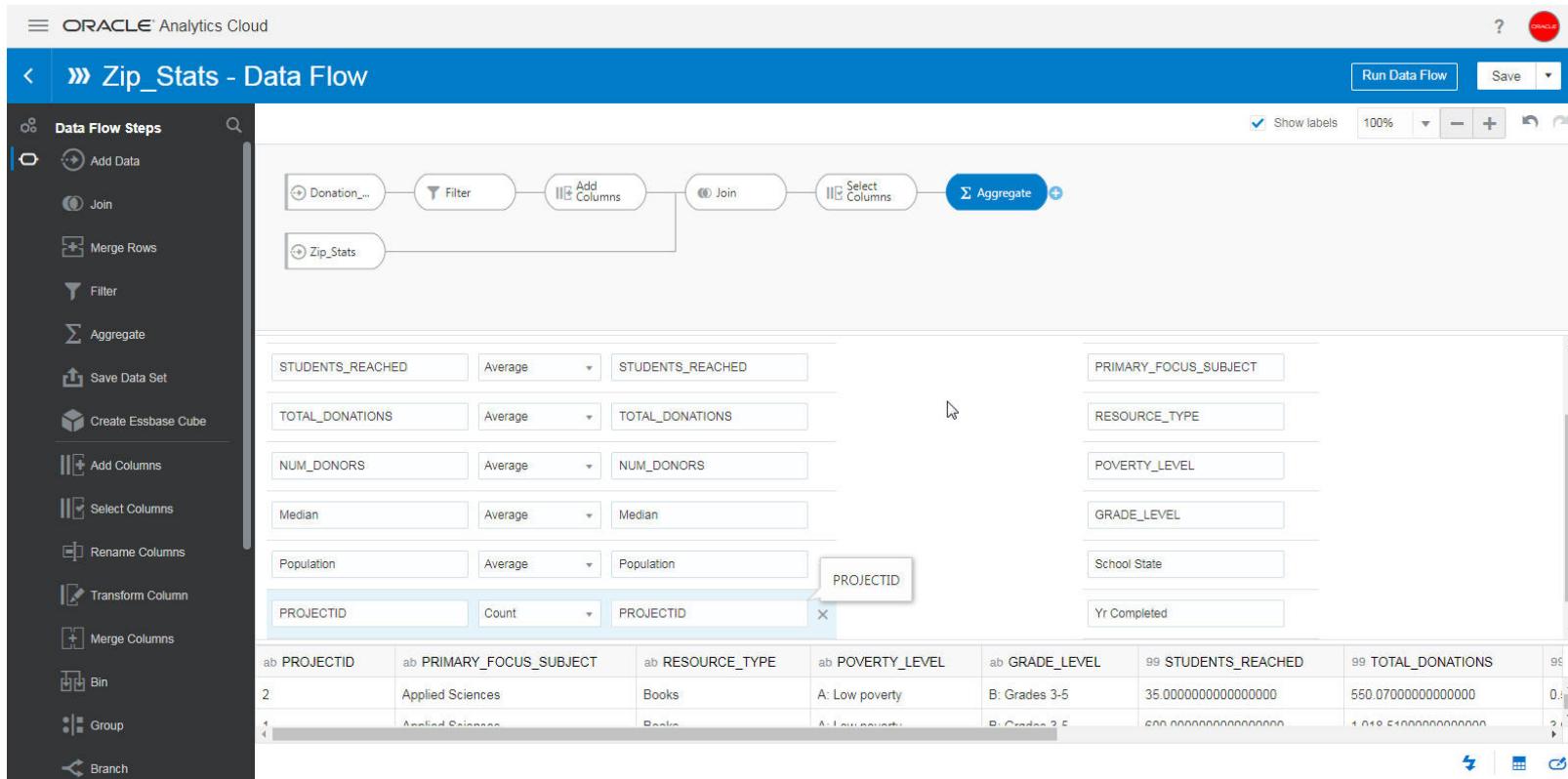
From the available Group By
Columns, remove “PROJECTID”

Assignment Screens: Create your first Data Flow



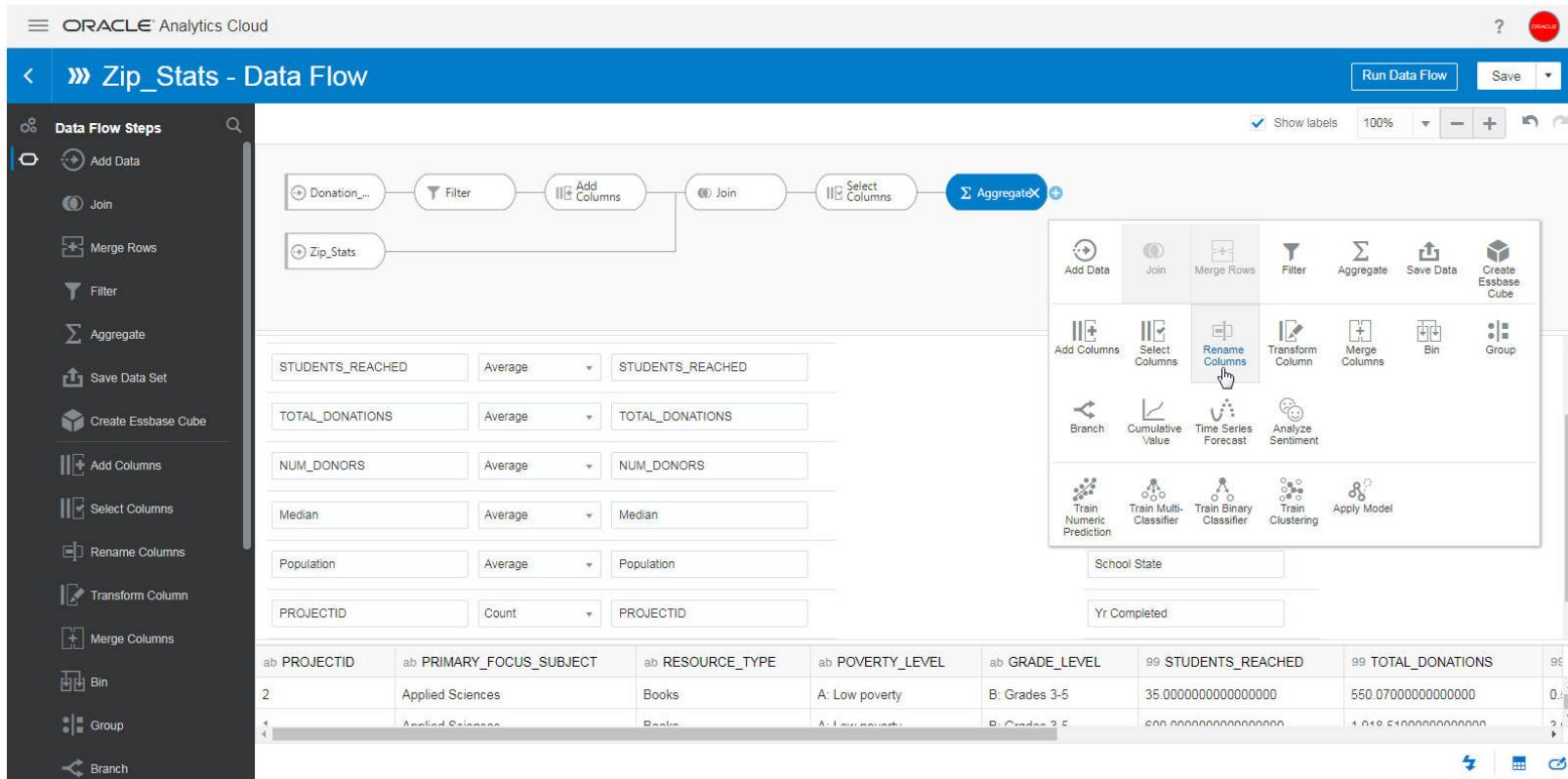
On the Aggregate, scroll below,
click on “+” icon, “Add
Aggregate”

Assignment Screens: Create your first Data Flow



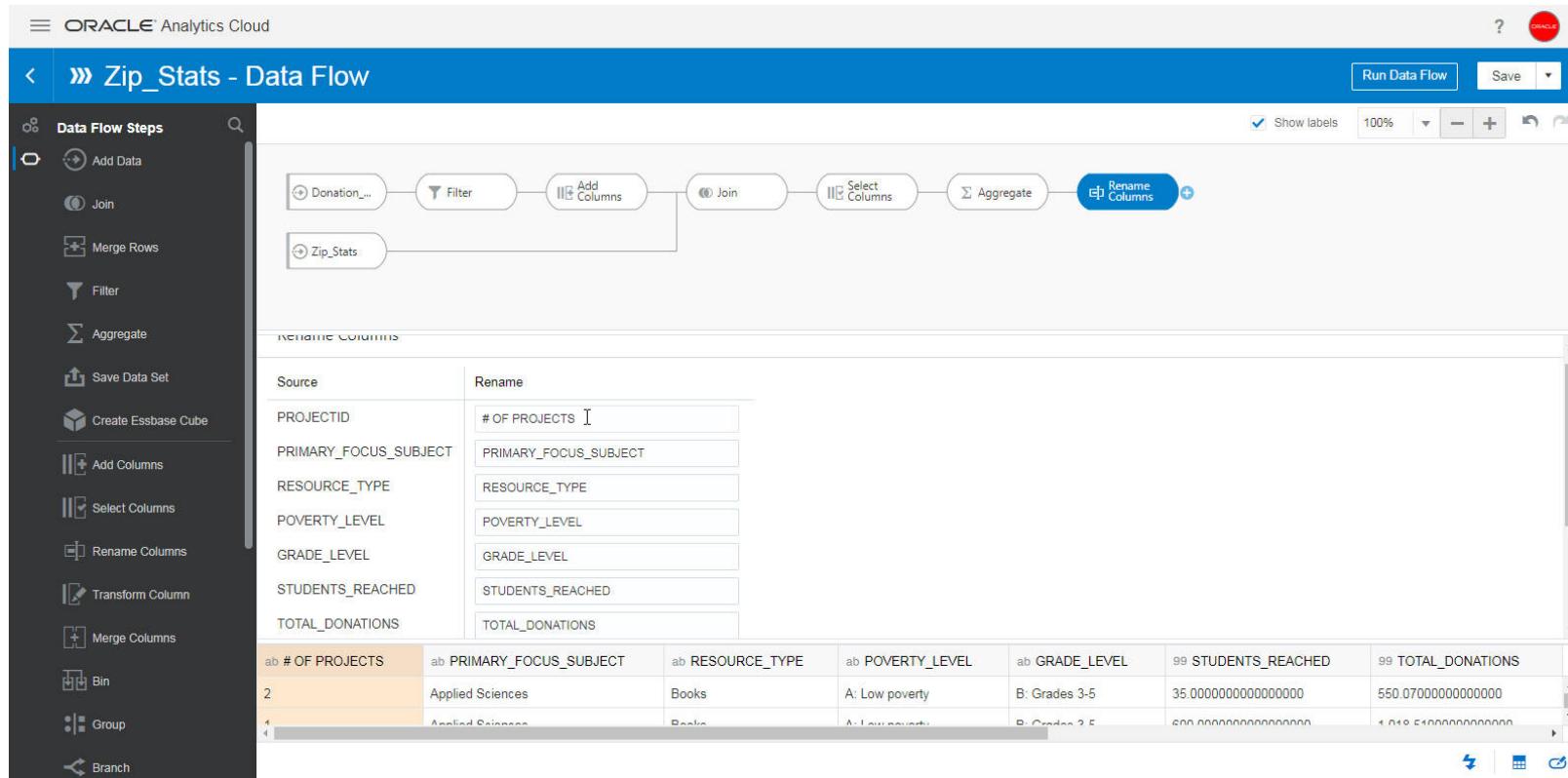
Select ProjectID, set Aggregate to Count, for other measures, set aggregate to “Average”, keep the columns name as default.

Assignment Screens: Create your first Data Flow



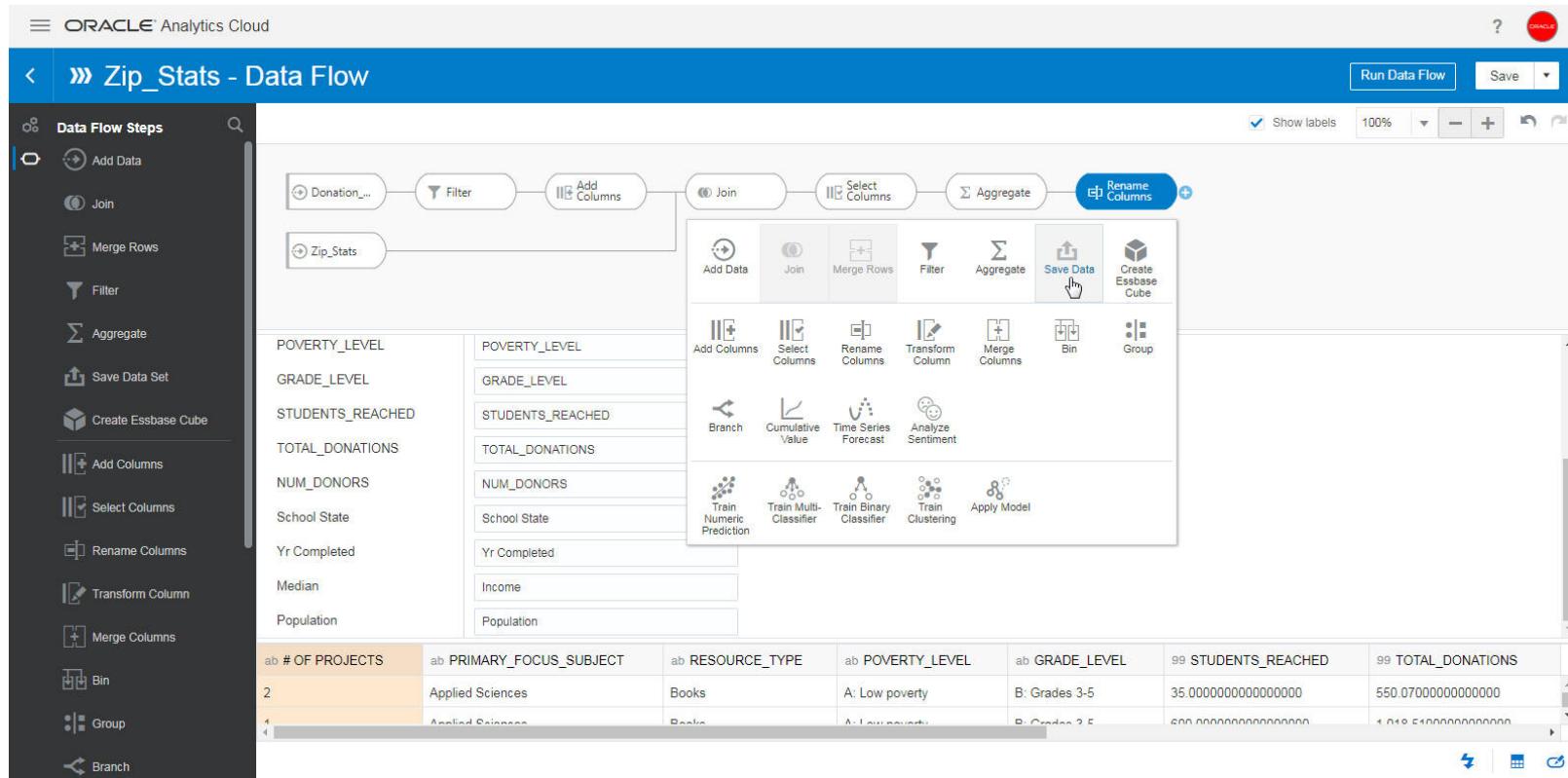
Back in the Data flow steps, click on the “+” icon to add step, select “Rename Columns”

Assignment Screens: Create your first Data Flow



Rename “PROJECTID” to “# of
PROJECTS”

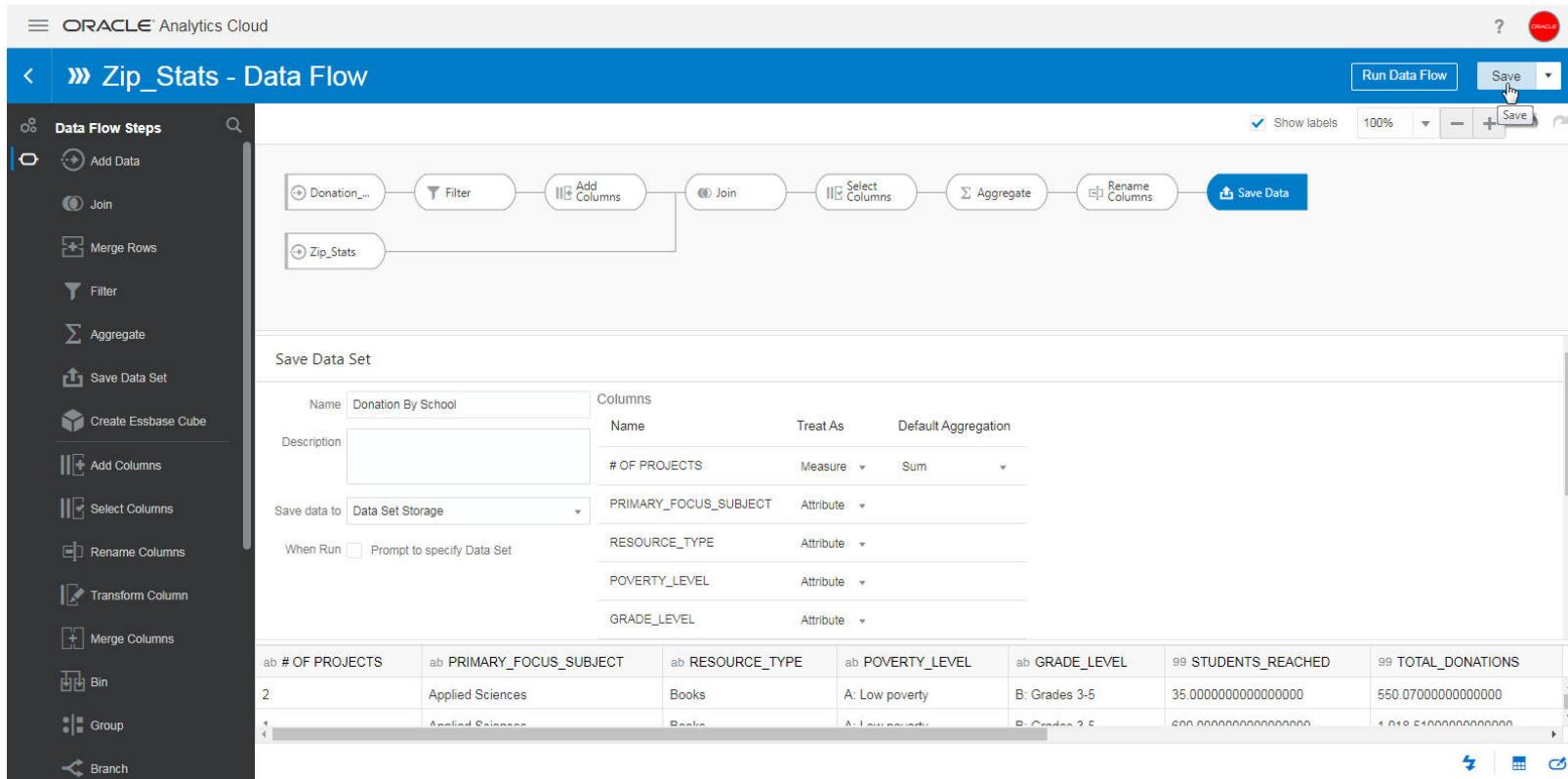
Assignment Screens: Create your first Data Flow



Rename “Median” to “Income”.

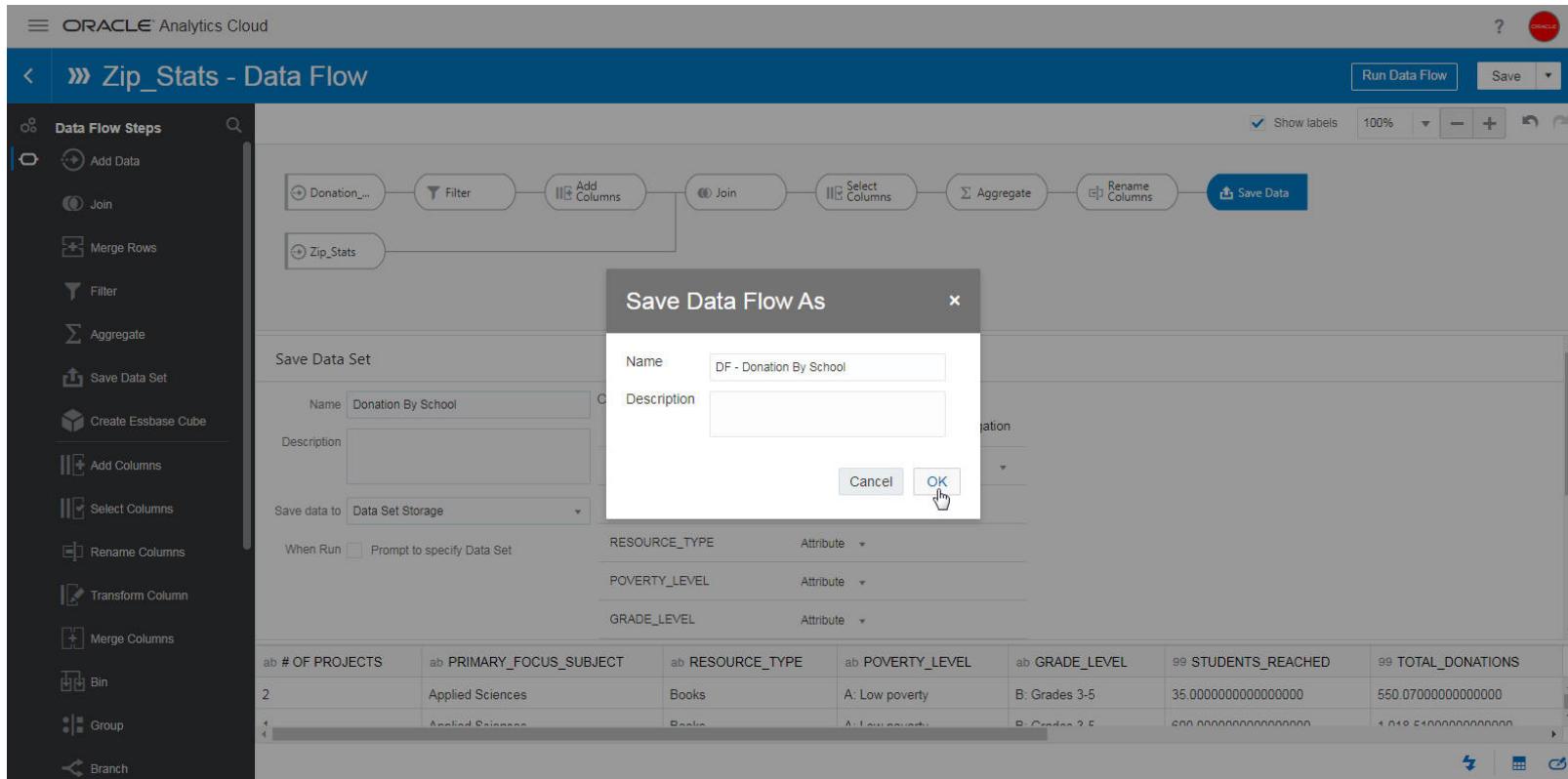
Add a new step, “Save Data”

Assignment Screens: Create your first Data Flow



Name the Data Set as “Donation By School”

Assignment Screens: Create your first Data Flow

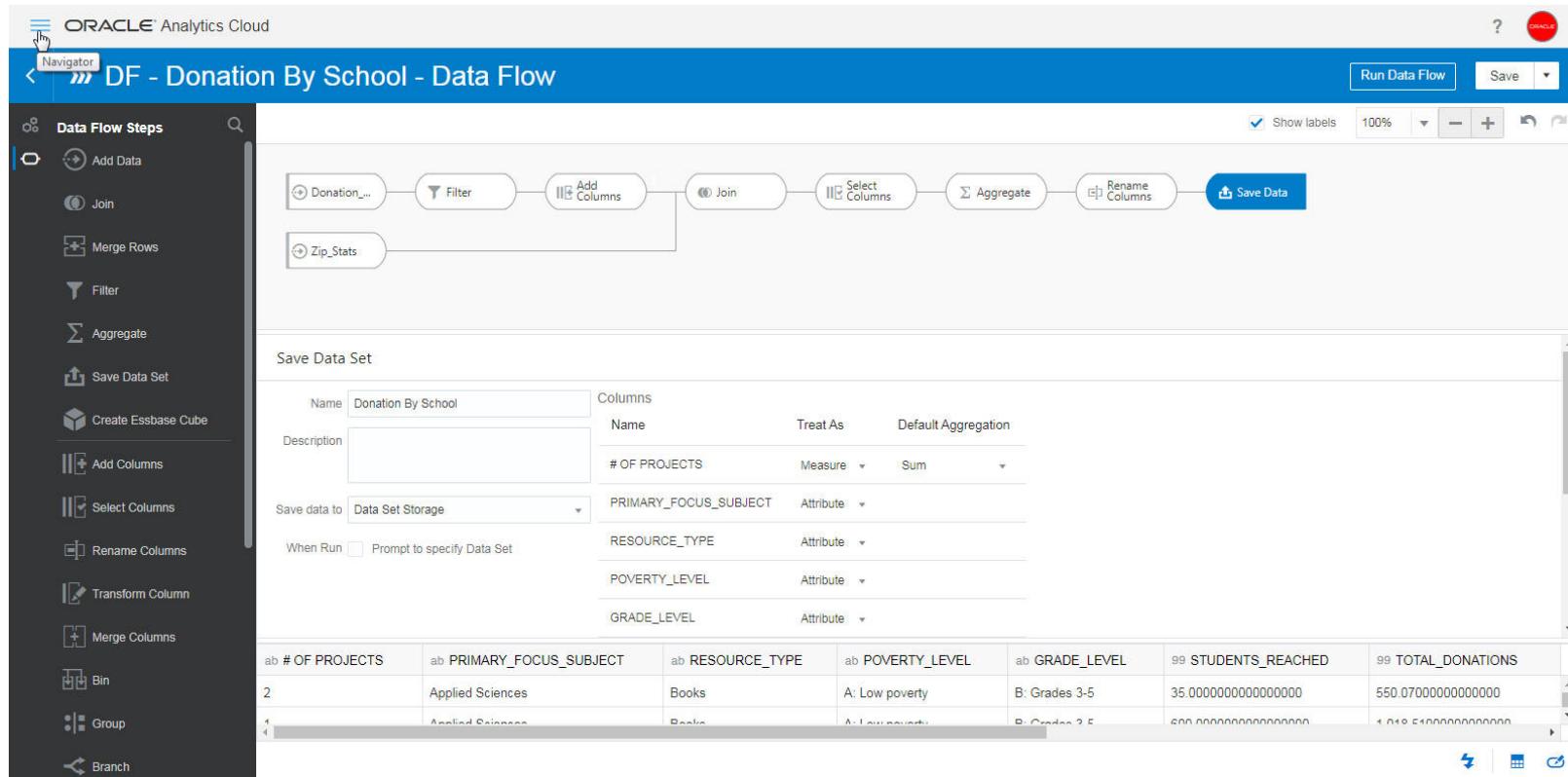


Click “Save” to save the Data Flow, Enter data flow name as “DF – Donation By School”,

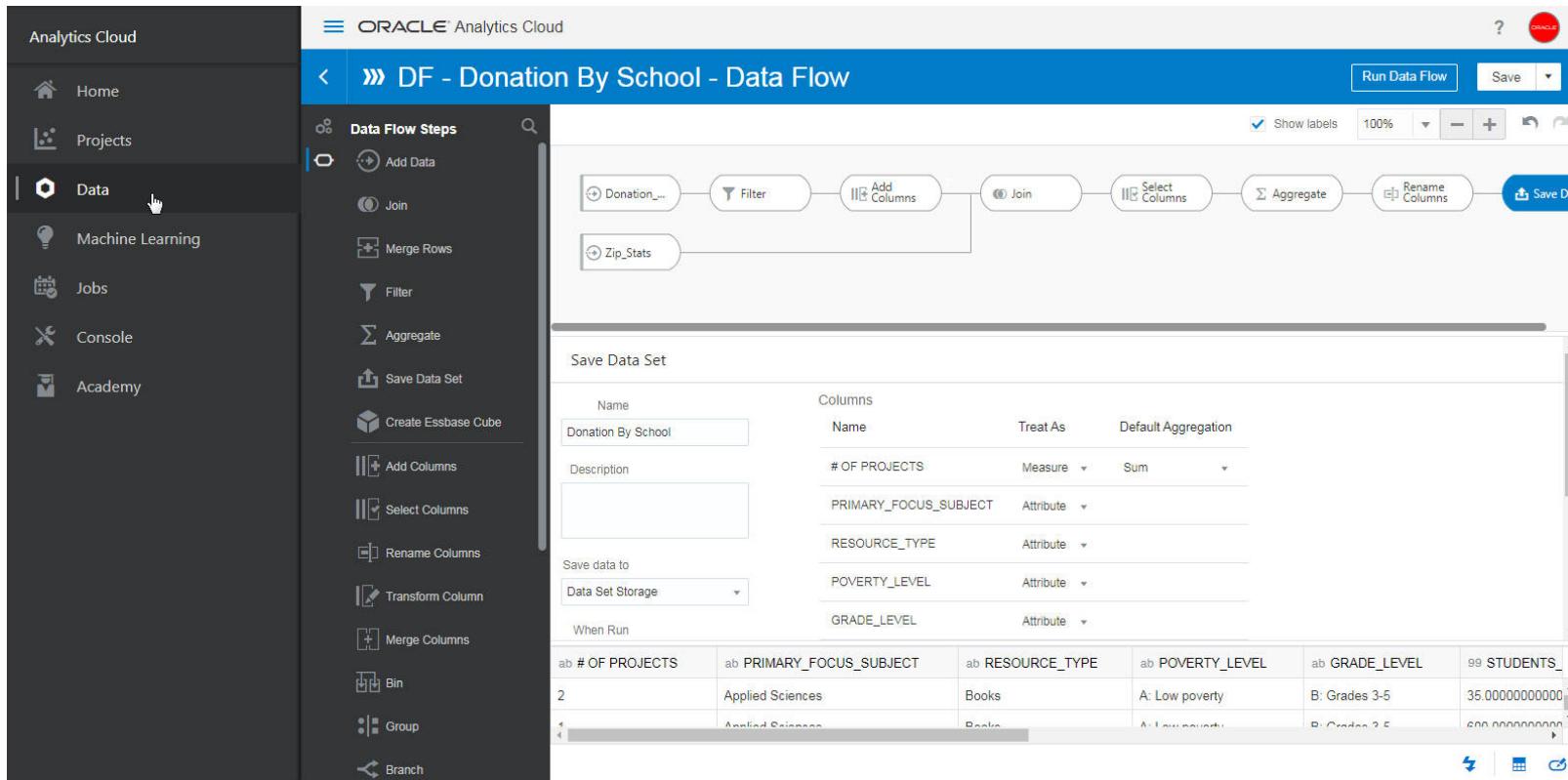
Click “OK”

Assignment Screens: Create your first Data Flow

Once the Data Flow is saved,
Click on “Navigator”



Assignment Screens: Create your first Data Flow



Click on “Data”

Assignment Screens: Create your first Data Flow

The screenshot shows the Oracle Analytics Cloud interface with the 'Data' tab selected. The 'Data Flows' tab is active. Two data flows are listed:

| Type | Name | Owner | Modified | Status |
|------|-----------------------------|-------|---------------|-----------------|
| »» | DF - Donation By School | Admin | 5 minutes ago | [Status Column] |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | [Status Column] |

A context menu is open over the 'CART Heart Disease Training' entry, showing options: Run, Open, Open in a New Tab, New schedule, Inspect, and Delete.

And you should see the Data Flow, recently created on the “Data Flow” tab.

You have successfully created your first data flow.

In summary you combined two files, selected relevant columns, aggregated the data and defined a target data set, in this data flow.

Thanks for watching !!

Administer your Data Flow

Run and Manage



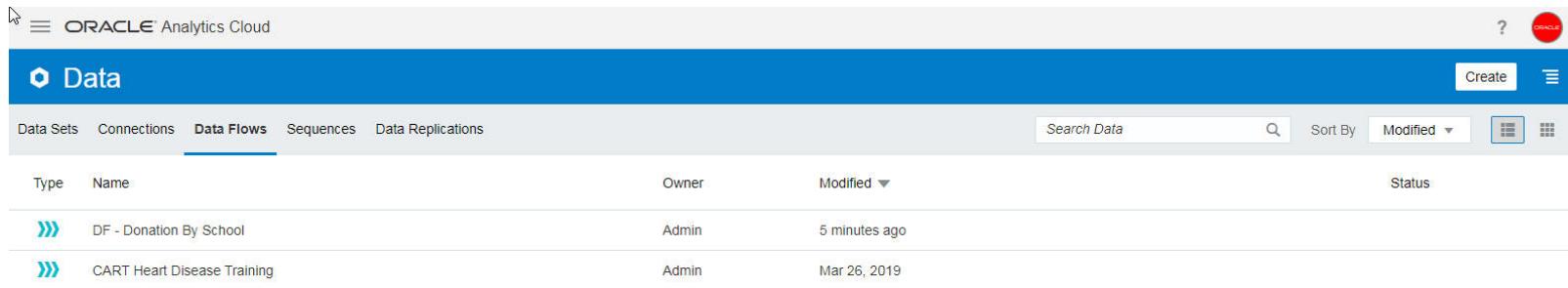
Section 3: Data Flow Deep Dive with Oracle Analytics

Run and Manage Data Flow

Execute your Data Flow

- Execute your data flow, to create your “transformed” Data Set
- Run as and when required, or Schedule the run of Data Flow, if required with repeat frequency
- Scheduling is available on the Oracle Analytics cloud, not available on the DVDesktop
- Delete Data Flow, if required
- Copy Data Flow, by leveraging “Save As”, if required
- Data Flows are automatically packaged and exported, when a DV Project containing the output Data Set is exported
- Data Flows are migrated to other environments, along with the DV Project Import

Assignment Screens: Run and Manage Data Flow

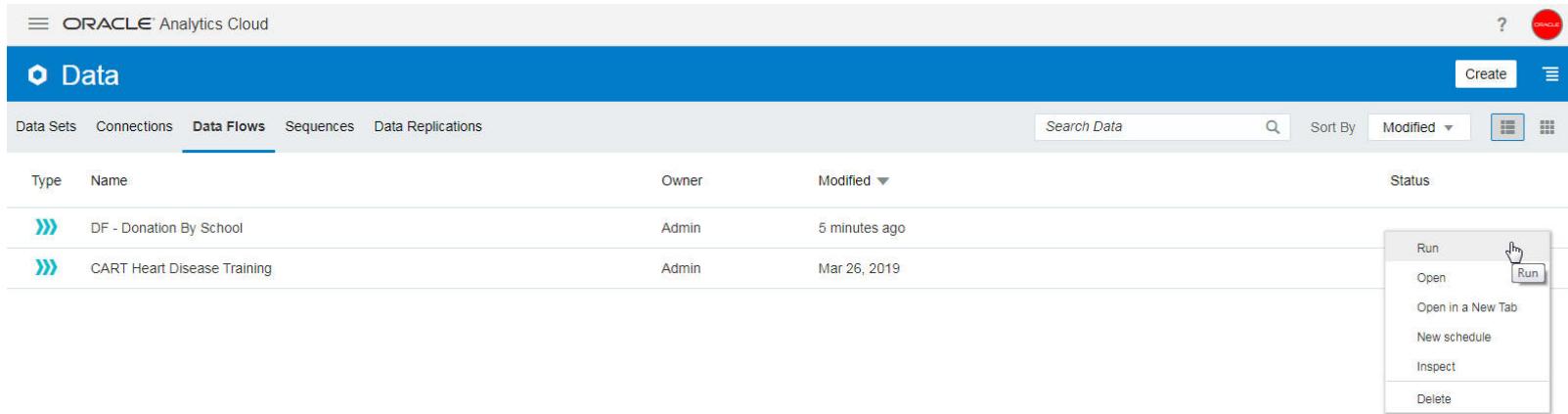


The screenshot shows the Oracle Analytics Cloud interface with the 'Data' tab selected. The 'Data Flows' tab is highlighted in blue. The main area displays a table with two rows of data flows. The columns are Type, Name, Owner, Modified, and Status. The first row has a green double arrow icon, the name 'DF - Donation By School', owner 'Admin', modified '5 minutes ago', and status 'OK'. The second row has a green double arrow icon, the name 'CART Heart Disease Training', owner 'Admin', modified 'Mar 26, 2019', and status 'OK'.

| Type | Name | Owner | Modified | Status |
|------|-----------------------------|-------|---------------|--------|
| »» | DF - Donation By School | Admin | 5 minutes ago | OK |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | OK |

You can navigate to the Data flow tab, from “Home” -> “Navigator” -> “Data” -> “Data Flows”, if you are not on the “Data Flows” tab.

Assignment Screens: Run and Manage Data Flow



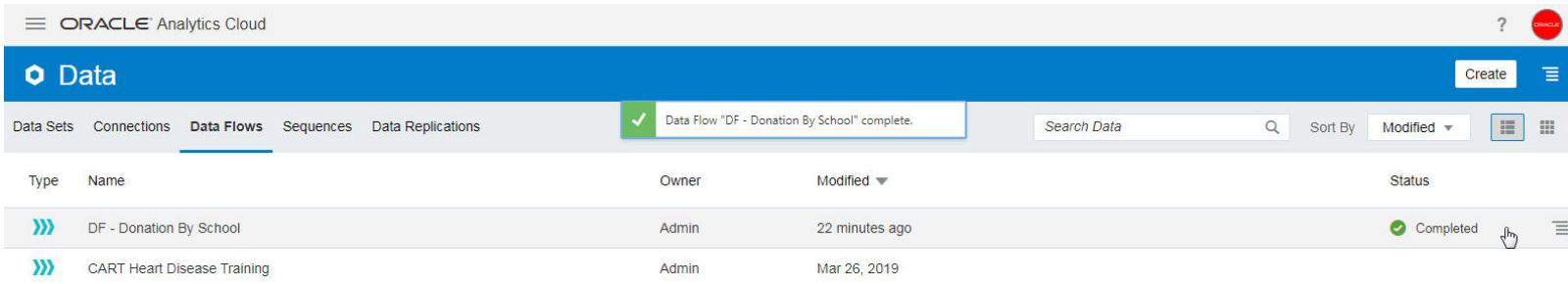
The screenshot shows the Oracle Analytics Cloud interface for managing Data Flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. Below the navigation is a search bar and a sort dropdown set to 'Modified'. The main content area displays a table with columns for Type, Name, Owner, Modified, and Status. Two entries are listed: 'DF - Donation By School' (Owner: Admin, Modified: 5 minutes ago) and 'CART Heart Disease Training' (Owner: Admin, Modified: Mar 26, 2019). A context menu is open over the second entry, listing options: Run (highlighted with a cursor icon), Open, Open in a New Tab, New schedule, Inspect, and Delete.

| Type | Name | Owner | Modified | Status |
|------|-----------------------------|-------|---------------|--------|
| »» | DF - Donation By School | Admin | 5 minutes ago | |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | |

From the “Action menu”, available for each Data Flow, you could perform various actions.

Lets click on “Run”

Assignment Screens: Run and Manage Data Flow

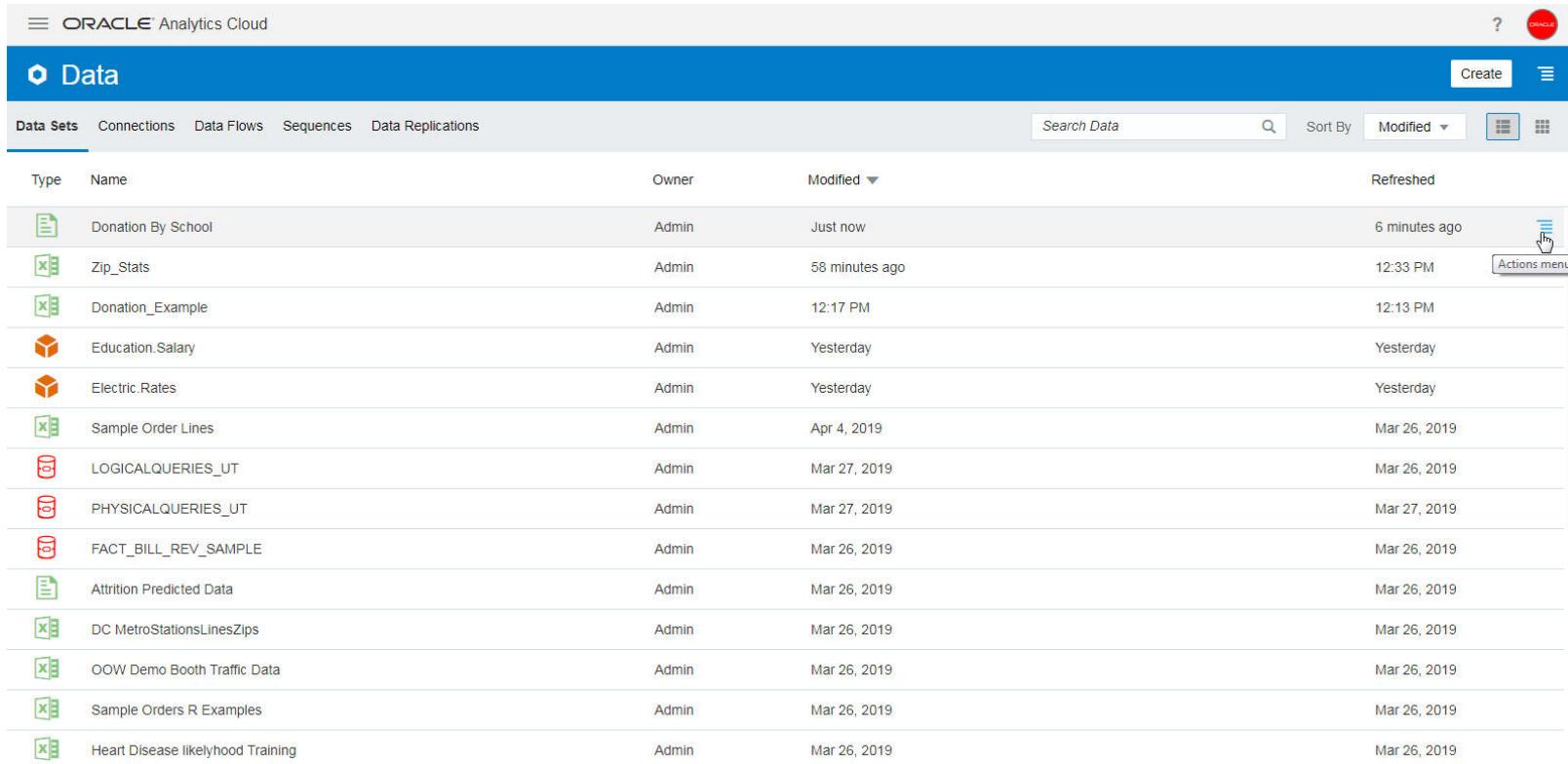


The screenshot shows the Oracle Analytics Cloud interface for managing data flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. A success message 'Data Flow "DF - Donation By School" complete.' is displayed above the main table. The table lists data flows with columns for Type, Name, Owner, Modified, and Status. The 'DF - Donation By School' flow is listed as completed.

| Type | Name | Owner | Modified | Status |
|------|-----------------------------|-------|----------------|-----------|
| »» | DF - Donation By School | Admin | 22 minutes ago | Completed |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | |

Once the “Run” is completed as indicated.

Assignment Screens: Run and Manage Data Flow



The screenshot shows the Oracle Analytics Cloud interface with the "Data" tab selected. The "Data Sets" tab is active. A list of datasets is displayed with columns for Type, Name, Owner, Modified, and Refreshed. An "Actions menu" icon is visible next to the "Modified" column for each dataset. The datasets listed include: Donation By School, Zip_Stats, Donation_Example, Education.Salary, Electric.Rates, Sample Order Lines, LOGICALQUERIES_UT, PHYSICALQUERIES_UT, FACT_BILL_REV_SAMPLE, Attrition Predicted Data, DC MetroStationsLinesZips, OOW Demo Booth Traffic Data, Sample Orders R Examples, and Heart Disease likelihood Training.

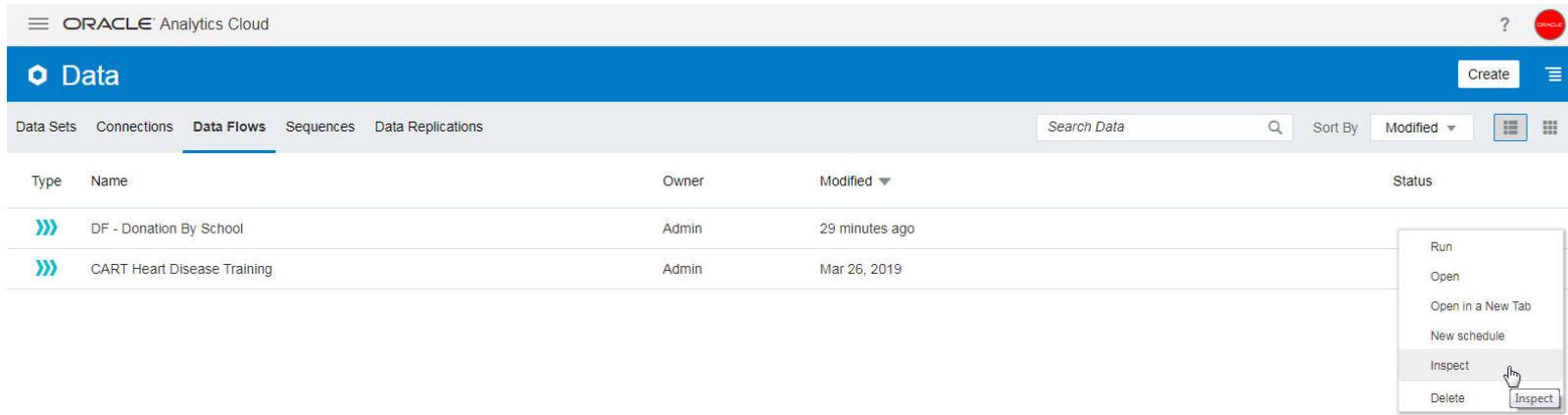
| Type | Name | Owner | Modified | Refreshed |
|-------|-----------------------------------|-------|----------------|---------------|
| File | Donation By School | Admin | Just now | 6 minutes ago |
| Table | Zip_Stats | Admin | 58 minutes ago | 12:33 PM |
| Table | Donation_Example | Admin | 12:17 PM | 12:13 PM |
| Cube | Education.Salary | Admin | Yesterday | Yesterday |
| Cube | Electric.Rates | Admin | Yesterday | Yesterday |
| Table | Sample Order Lines | Admin | Apr 4, 2019 | Mar 26, 2019 |
| Table | LOGICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 26, 2019 |
| Table | PHYSICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 27, 2019 |
| Table | FACT_BILL_REV_SAMPLE | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | Attrition Predicted Data | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | DC MetroStationsLinesZips | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | OOW Demo Booth Traffic Data | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | Sample Orders R Examples | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | Heart Disease likelihood Training | Admin | Mar 26, 2019 | Mar 26, 2019 |

Move to the “Data Sets” tab.

There you will now find the target data set, the one that is created after the run. From the “Actions Menu” of the Data Set.

You could create a visualization Project.

Assignment Screens: Run and Manage Data Flow



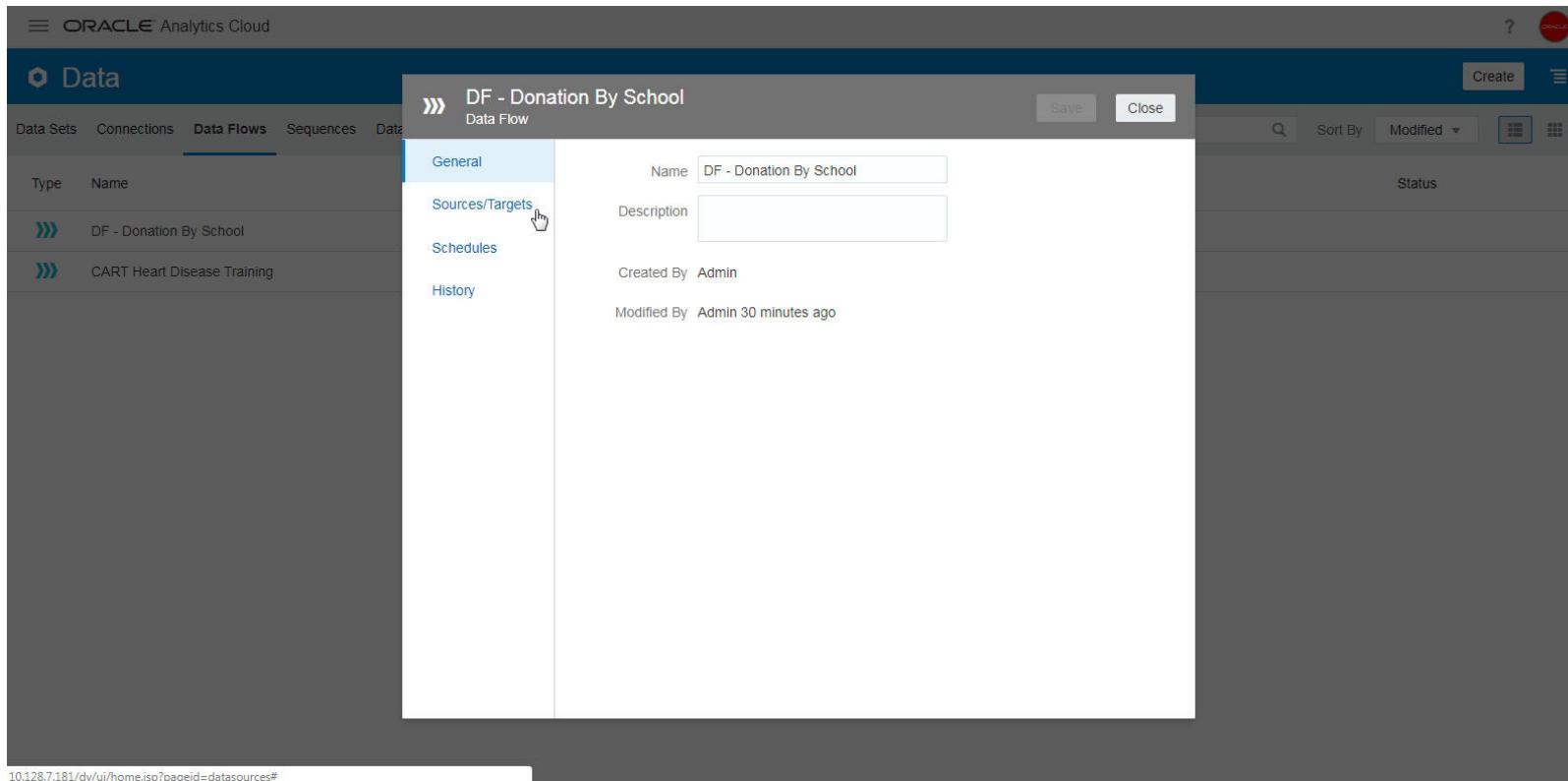
The screenshot shows the Oracle Analytics Cloud interface. The top navigation bar includes links for Data Sets, Connections, **Data Flows**, Sequences, and Data Replications. The main content area displays a table of data flows. The columns are Type, Name, Owner, Modified, and Status. Two entries are listed:

| Type | Name | Owner | Modified | Status |
|------|-----------------------------|-------|----------------|--------|
| »» | DF - Donation By School | Admin | 29 minutes ago | |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | |

A context menu is open over the 'CART Heart Disease Training' row, with the 'Inspect' option highlighted. The URL in the browser's address bar is 10.128.7.181/dv/ui/home.jsp?pageid=datasources#.

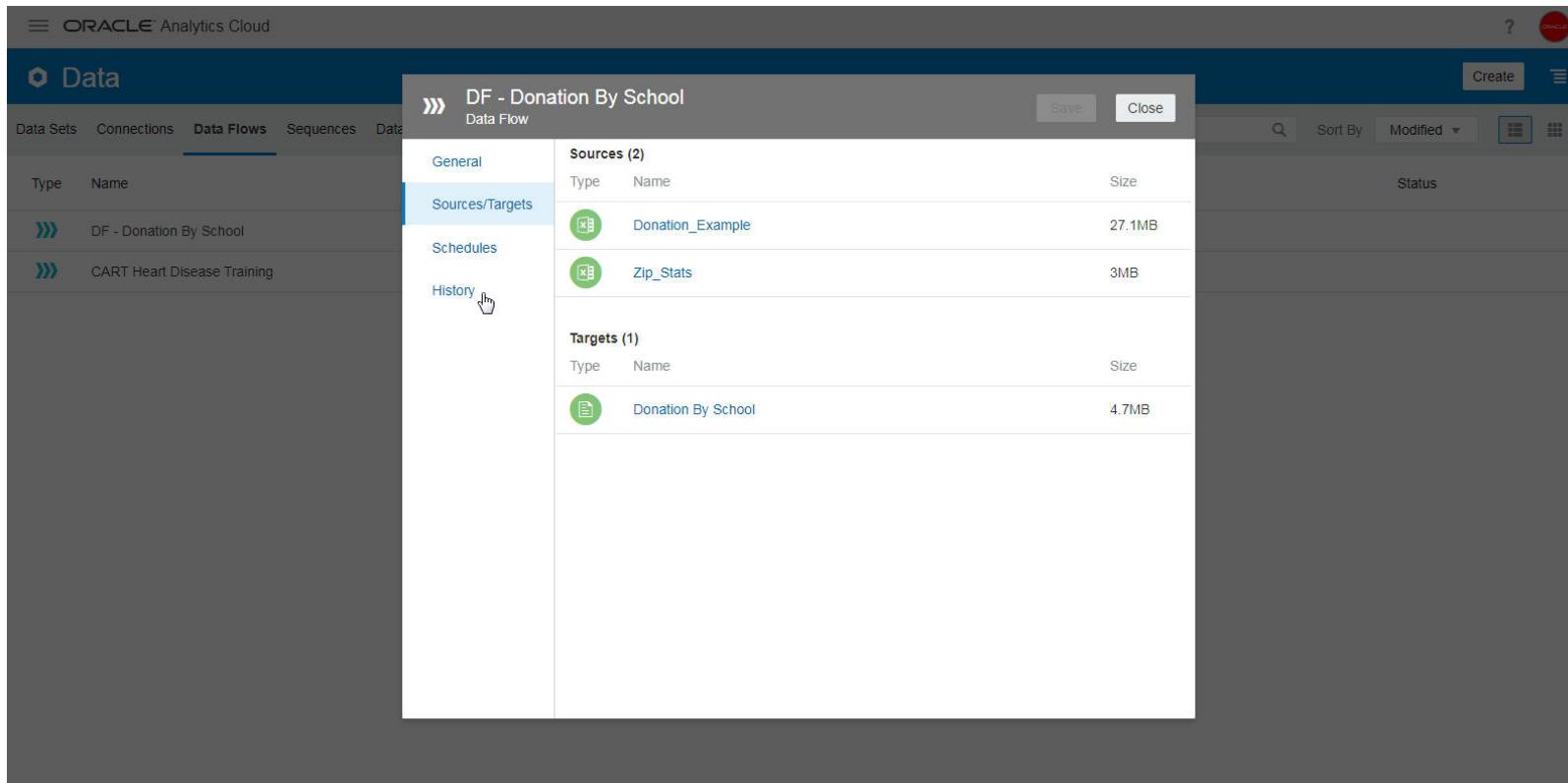
Lets come back to the “Data Flows”, tab, from the Action Menu, Lets inspect your “DataSet”

Assignment Screens: Run and Manage Data Flow



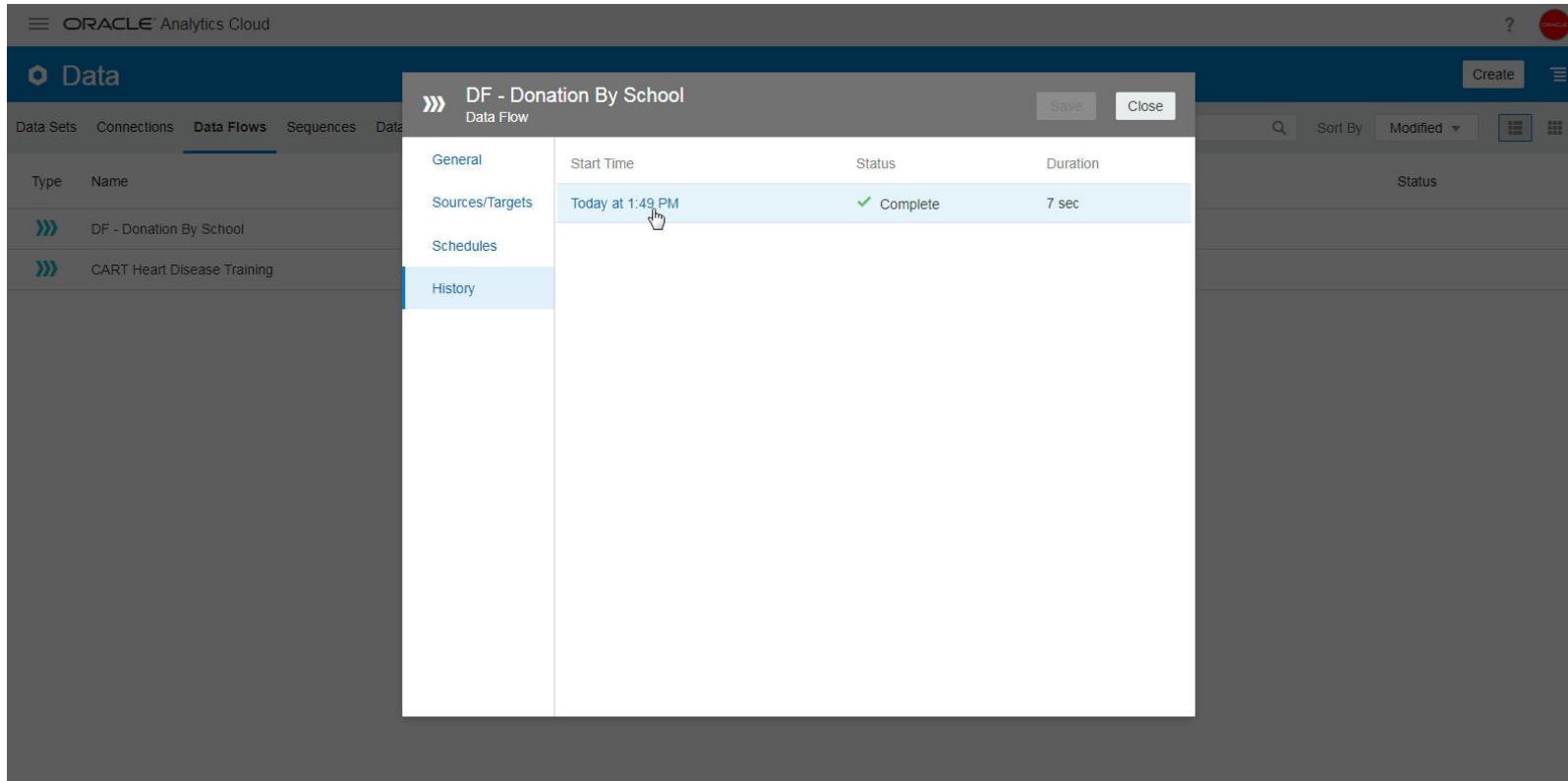
Here, you find the General Info tab.

Assignment Screens: Run and Manage Data Flow



The sources and targets, of this Data Flow

Assignment Screens: Run and Manage Data Flow



You can also find the History of its execution. For each execution, if you click on the individual execution.

Assignment Screens: Run and Manage Data Flow

The screenshot shows the Oracle Analytics Cloud interface for managing data flows. A modal window is open, titled 'dataflow-'Admin''.DF - Donation By School'. The modal has two tabs: 'General' (selected) and 'Status'. The 'General' tab displays the following information:

| Type | Name |
|--------------------------------|--|
| »» DF - Donation By School | dataflow-'Admin''.DF - Donation By School' |
| »» CART Heart Disease Training | |

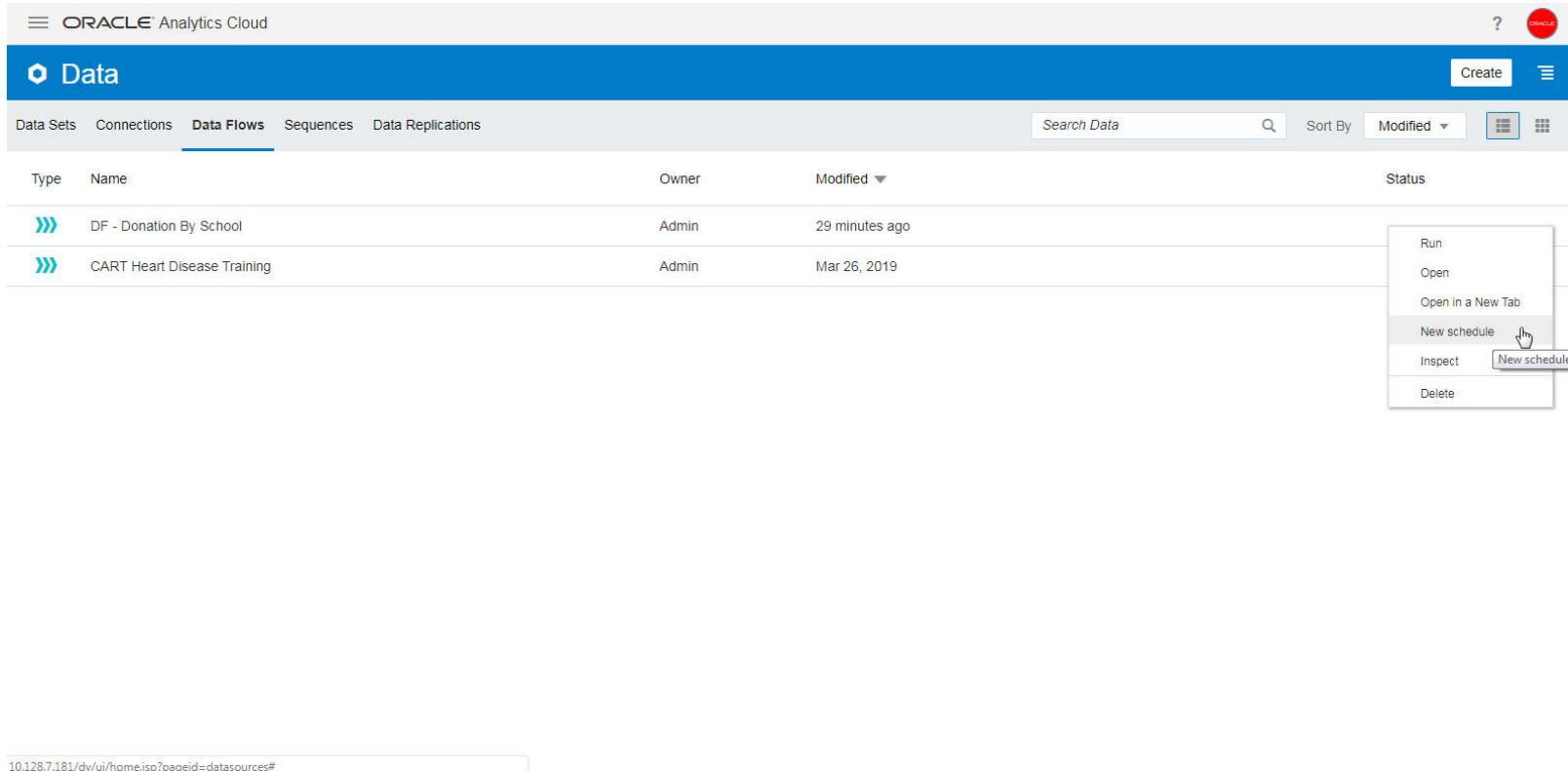
General Tab Details:

- Name:** dataflow-'Admin''.DF - Donation By School'
- Description:** dataflow-'Admin''.DF - Donation By School'
- Created By:** Admin 9 minutes ago
- Modified By:** Admin 9 minutes ago
- Object:** DF - Donation By School
- Activity:** Run Data Flow
- Start Time:** Today at 1:49 PM
- Status:** ✓ Complete
- Duration:** 1 minute
- Schedule:** None

It will open up the Job details.

Lets click "Close"

Assignment Screens: Run and Manage Data Flow



The screenshot shows the Oracle Analytics Cloud interface for managing data flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. Below the navigation is a search bar and sorting options. The main table lists data flows with columns for Type, Name, Owner, Modified, and Status. Two entries are visible: 'DF - Donation By School' (Owner: Admin, Modified: 29 minutes ago) and 'CART Heart Disease Training' (Owner: Admin, Modified: Mar 26, 2019). A context menu is open for the second entry, showing options like Run, Open, Open in a New Tab, New schedule (which is highlighted with a mouse cursor), Inspect, and Delete.

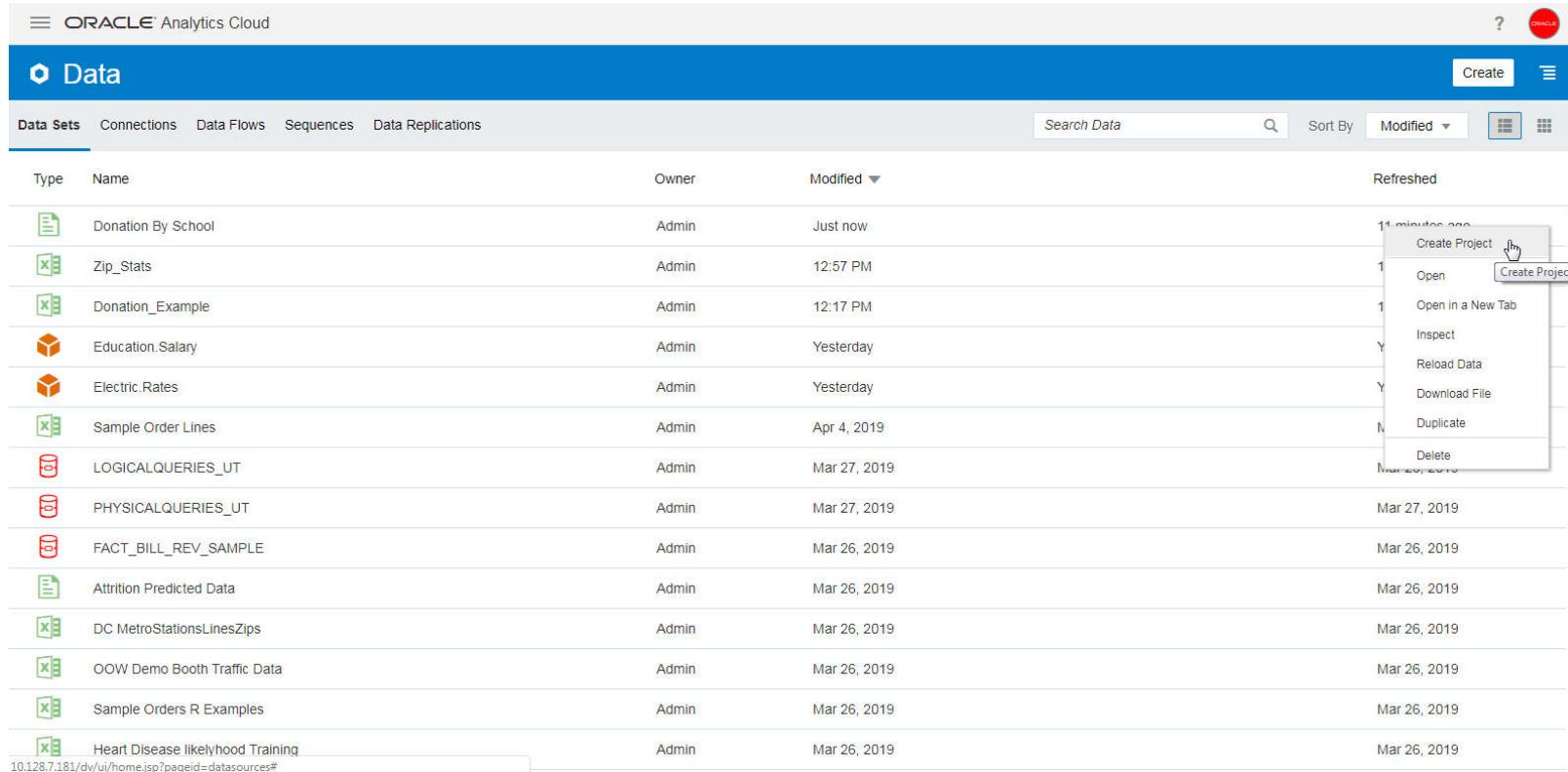
| Type | Name | Owner | Modified | Status |
|------|-----------------------------|-------|----------------|--------|
| »» | DF - Donation By School | Admin | 29 minutes ago | |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | |

Back on the “Data Flows” tab.

To schedule a Data Flow, click on the “Actions Menu” for the Data Flow, you will find a Sub-Menu, for “New Schedule”

However this is available only in cloud flavor of OA, it is not available on your DVD.

Assignment Screens: Run and Manage Data Flow



The screenshot shows the Oracle Analytics Cloud interface with the 'Data' tab selected. The main area displays a list of data sets. A context menu is open over the first item, 'Donation By School', which includes options like 'Create Project', 'Open', 'Inspect', etc. The 'Create Project' option is highlighted with a red box.

| Type | Name | Owner | Modified | Refreshed |
|-------|-----------------------------------|-------|--------------|----------------|
| File | Donation By School | Admin | Just now | 11 minutes ago |
| Table | Zip_Stats | Admin | 12:57 PM | 1 hour ago |
| Table | Donation_Example | Admin | 12:17 PM | 1 hour ago |
| Cube | Education.Salary | Admin | Yesterday | Yesterda... |
| Cube | Electric.Rates | Admin | Yesterday | Yesterda... |
| Table | Sample Order Lines | Admin | Apr 4, 2019 | Mar 27, 2019 |
| Table | LOGICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 27, 2019 |
| Table | PHYSICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 27, 2019 |
| Table | FACT_BILL_REV_SAMPLE | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | Attrition Predicted Data | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | DC MetroStationsLinesZips | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | OOB Demo Booth Traffic Data | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | Sample Orders R Examples | Admin | Mar 26, 2019 | Mar 26, 2019 |
| Table | Heart Disease likelihood Training | Admin | Mar 26, 2019 | Mar 26, 2019 |

Lets quickly create a project on the Data Set created.

Lets go to the “Data Sets” tab., select the data set, “Donation By School”, from the menu, click “Create Project”

Assignment Screens: Run and Manage Data Flow

The screenshot shows the Oracle Analytics Cloud interface. On the left, the 'Data' pane lists various columns: PRIMARY_FOCUS..., RESOURCE_TYPE, POVERTY_LEVEL, GRADE_LEVEL, School State, Yr Completed, SCHOOL_ID, STUDENTS_REAC..., TOTAL_DONATION..., NUM_DONORS, Income, Population, # OF PROJECTS, My Calculations, and Value Labels. A context menu is open over the 'School State', 'TOTAL_DONATION...', and 'Population' items, with options like 'Create Best Visualization' and 'Pick Visualization...'. The main workspace is titled 'Untitled - Project' and contains a 'Canvas 1' area with a 'Drop Visualizations or Data Here' placeholder. The top navigation bar includes 'Prepare', 'Visualize' (which is selected), 'Narrate', and 'Save'.

This data set , is what was desired in the first place. A blend or mash up of two files.

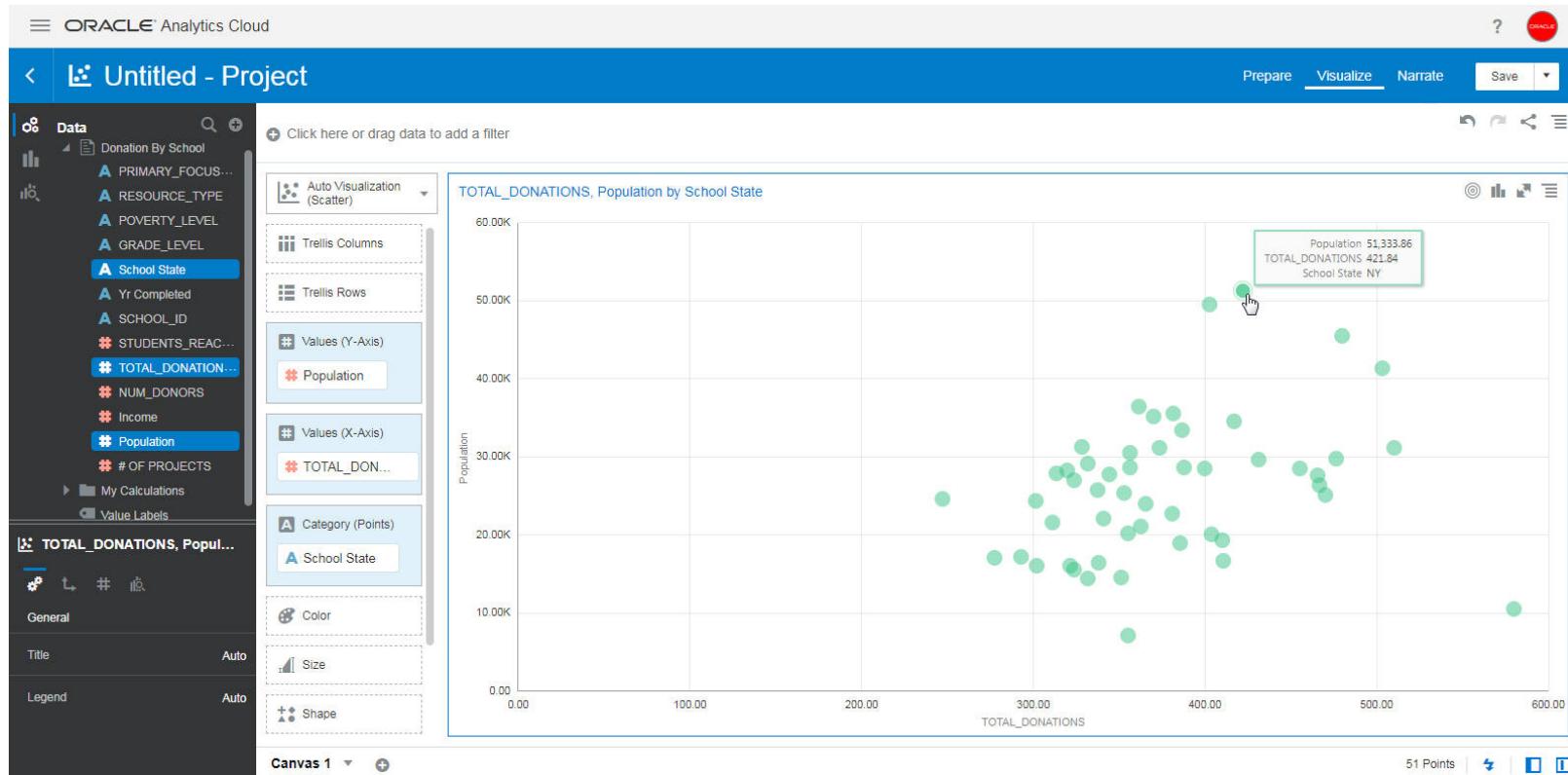
You see all relevant columns.

Select, with Ctrl-Key, pressed,

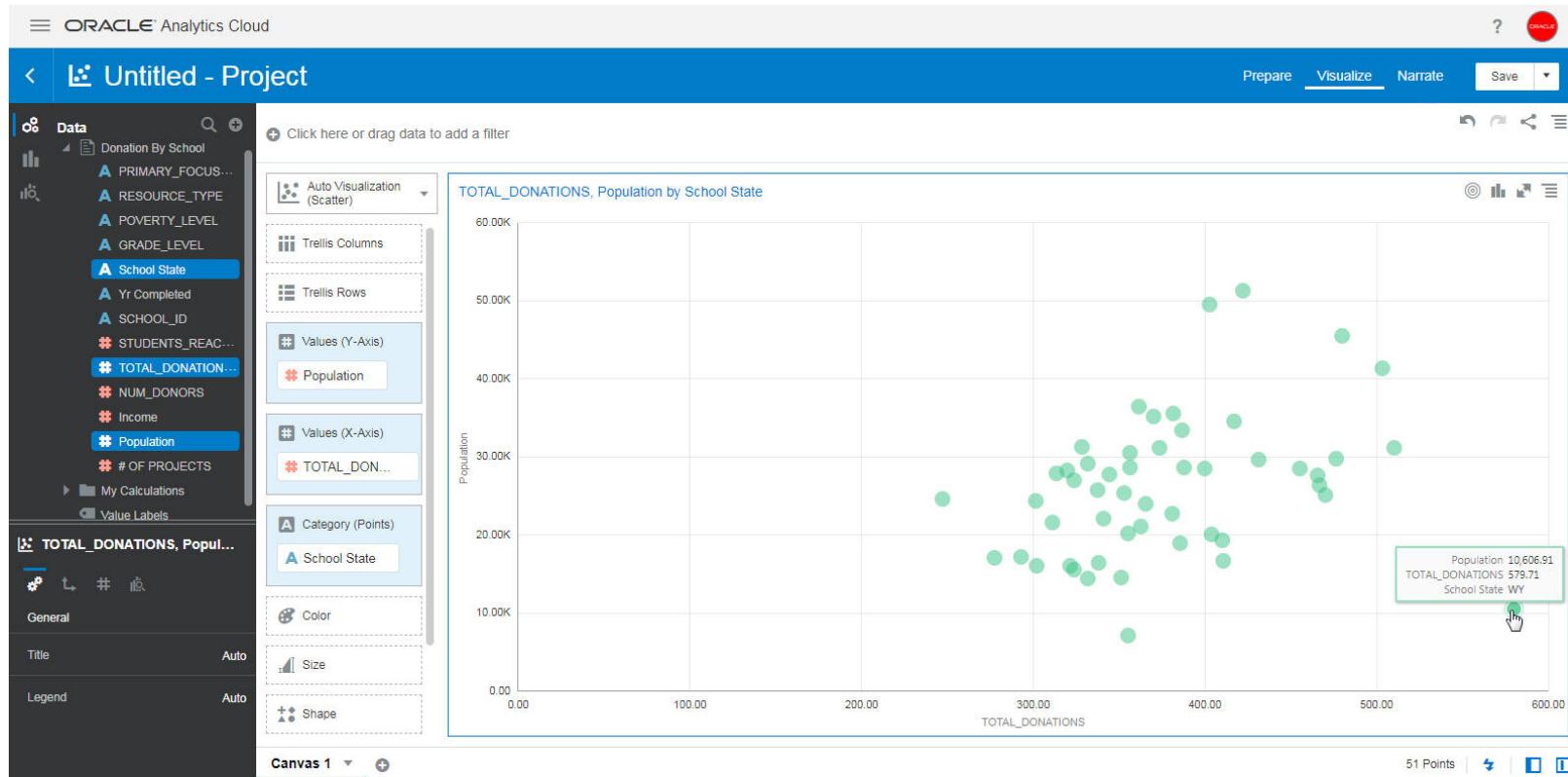
“School State”, “Total_Donation” and “Population”

Right Click, “create best visualization”

Assignment Screens: Run and Manage Data Flow



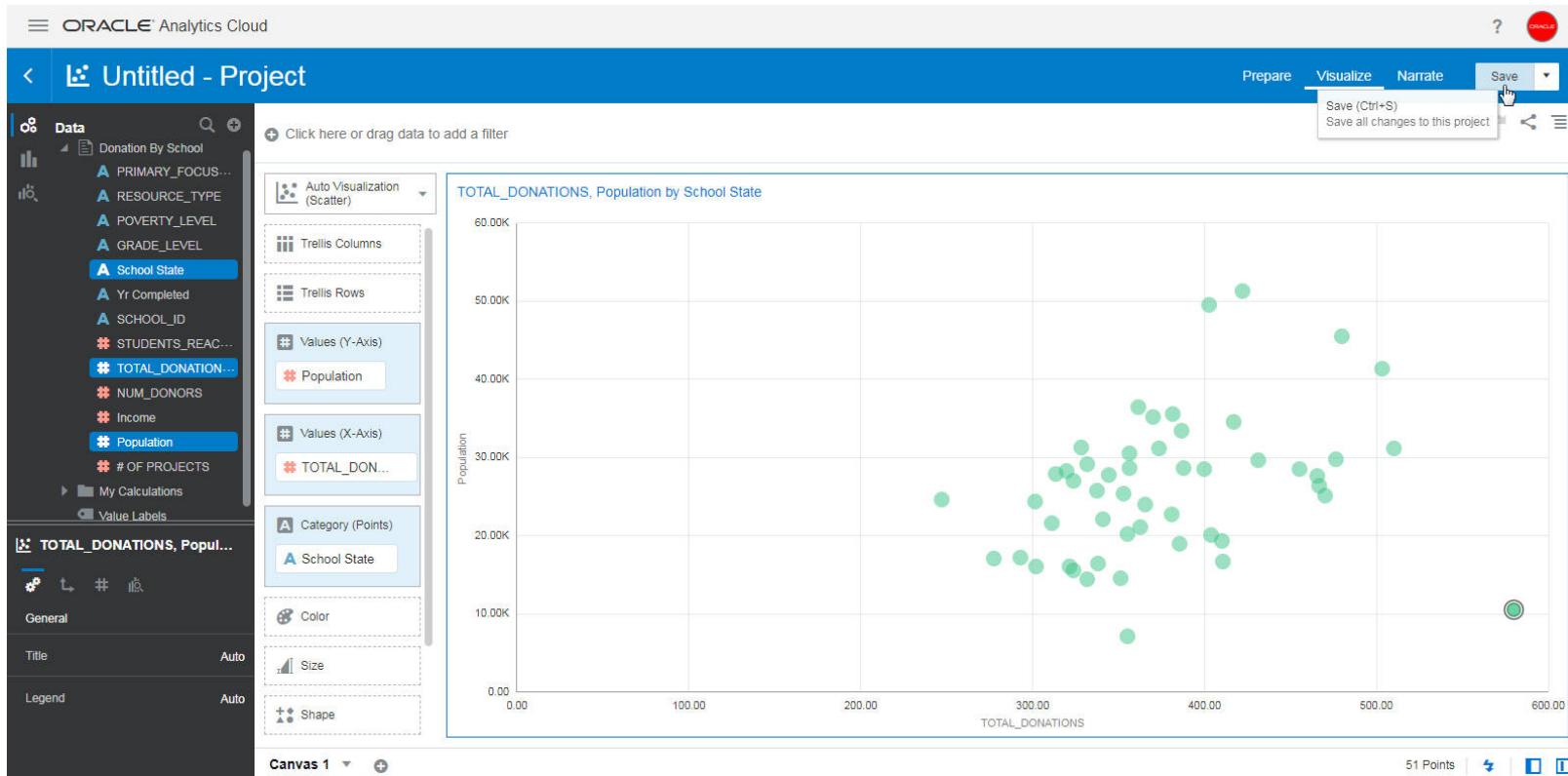
Assignment Screens: Run and Manage Data Flow



A scatter diagram is created.

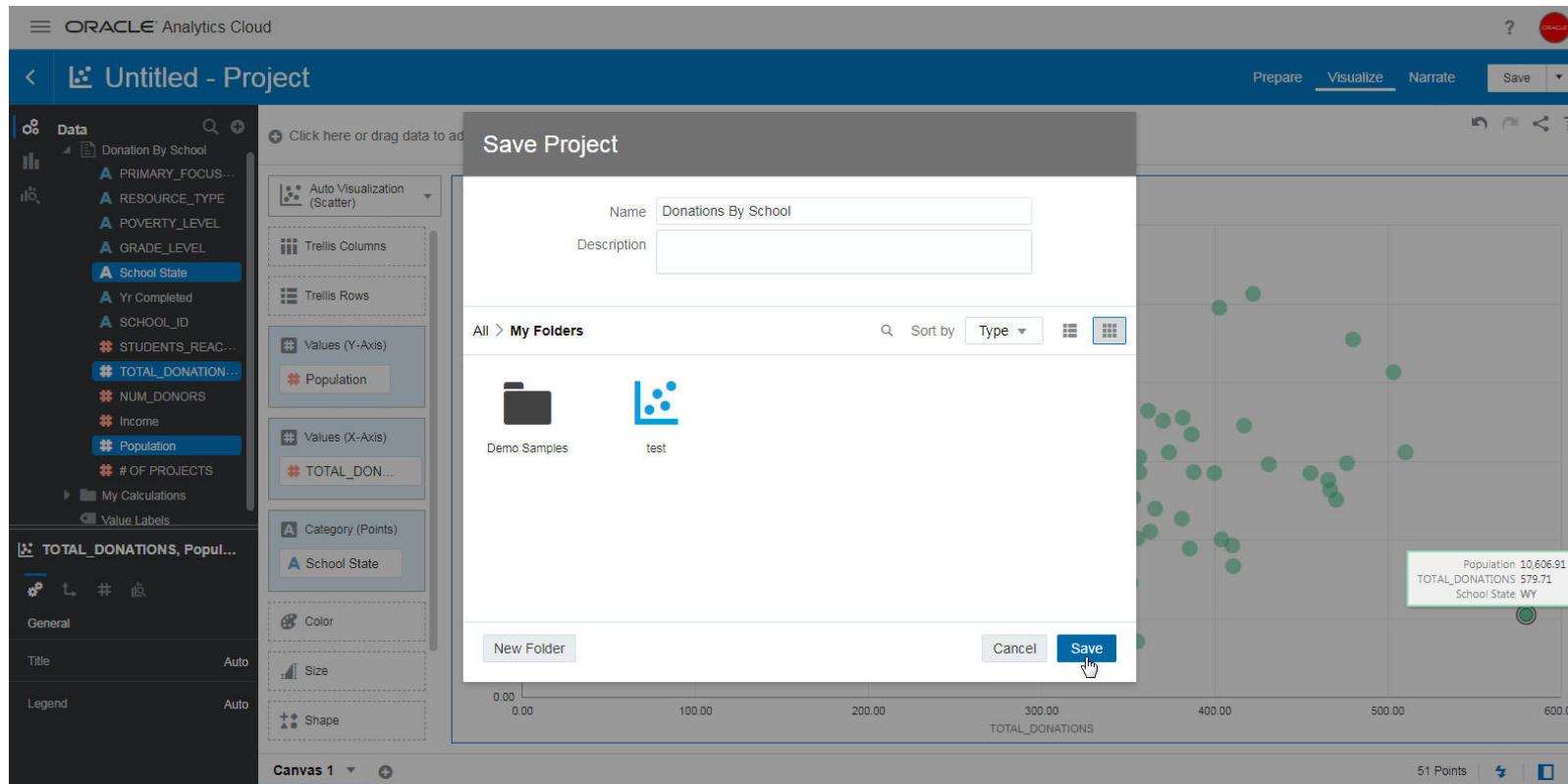
You could create other visuals as required with this data set.

Assignment Screens: Run and Manage Data Flow



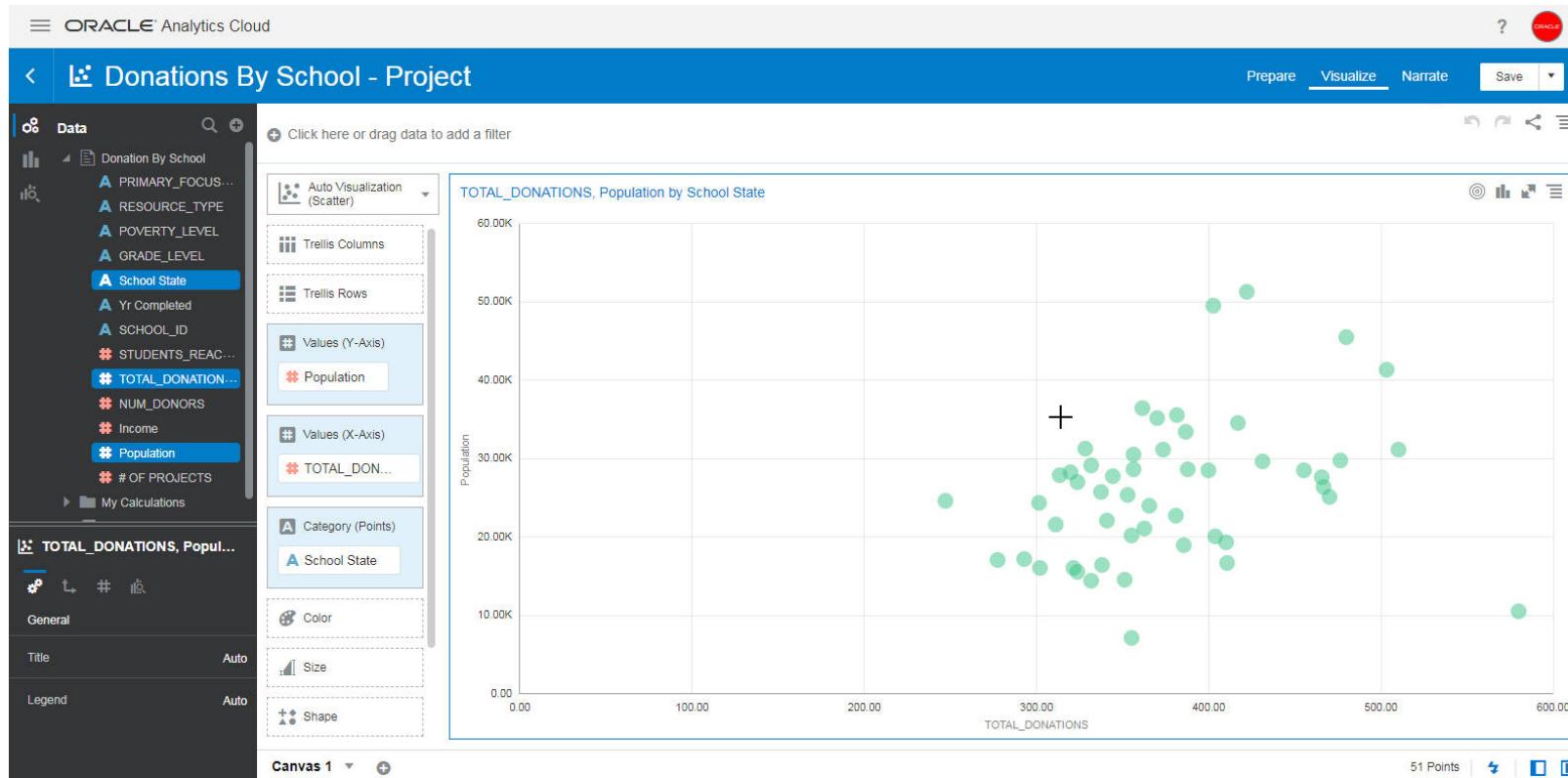
You will now Save this Project,
click Save

Assignment Screens: Run and Manage Data Flow



Give the Project a Name
“Donations by School”

Assignment Screens: Run and Manage Data Flow



In this lecture you learnt to manage your data flows, run your data flow and access the target data set.

Thanks for watching !!

Meet needs of multiple users
Create multiple outputs, in one go !

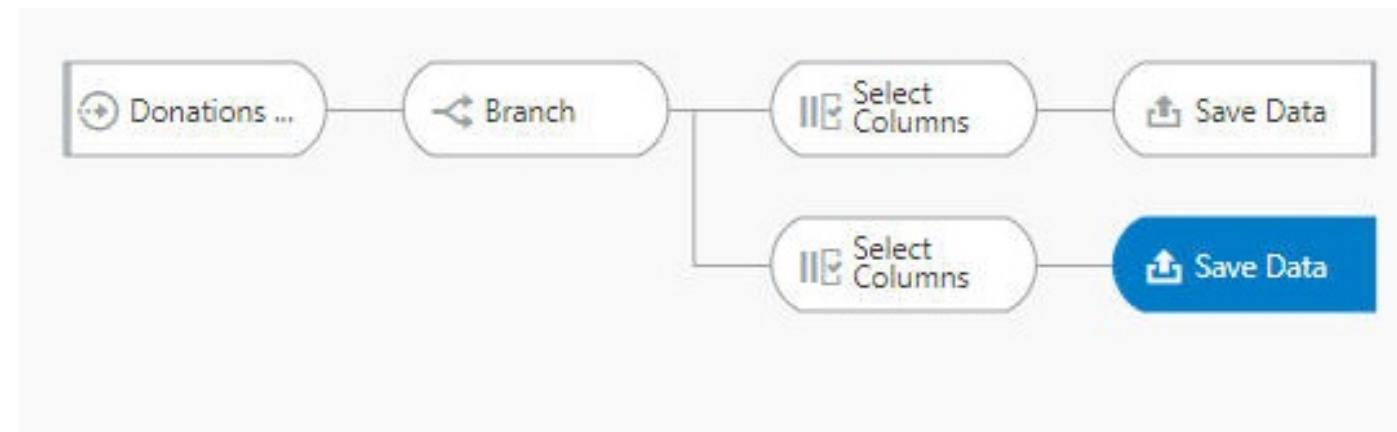


Section 3: Data Flow Deep Dive with Oracle Analytics

Create multiple target outputs with Data Flow

One workflow...multiple outputs

- You can branch a data flow into multiple connections to downstream nodes, which creates multiple outputs from a data flow
- You can have maximum 5 number of connections or outputs for a branch



Assignment Screens: Create multiple target outputs with Data Flow

The screenshot shows the Oracle Analytics Cloud home page. At the top, there's a search bar with the placeholder "What are you interested in?". Below it, a "What's New" section displays various data assets: "TOTAL_DONATIONS, Population by School State" (a scatter plot), "Donation By School File" (green card), "SpendPlanning.Spend OLAP" (orange card), "Zip_Stats File" (green card), "Donations By School Project" (small card), "Donation_Example File" (green card), "Education Salary OLAP" (orange card), "Electric.Rates OLAP" (orange card), "Sample Project Project" (small card), "Sample Order Lines File" (green card), "UsageTracking_Sam... Project" (small card), and "LOGICALQUERIES_UT Database" (red card). A tooltip on the right says: "Tip: Create a new Data Set by simply dropping your file anywhere on this page". At the bottom, there are three navigation icons: a cloud with a house, a database, and a paintbrush.

What are you interested in?

Home

Create

Project

Data Set

Data Flow

Sequence

Connection

Data Replication

Replication Connection

TOTAL_DONATIONS, Population by School State

Updated 2:11 PM

Donation By School File

Updated 2:03 PM

SpendPlanning.Spend OLAP

Updated 12:57 PM

Zip_Stats File

Donations By School Project

Updated 12:17 PM

Donation_Example File

Updated Yesterday

Education Salary OLAP

Updated Yesterday

Electric.Rates OLAP

Sample Project Project

Updated Apr 4, 2019

Sample Order Lines File

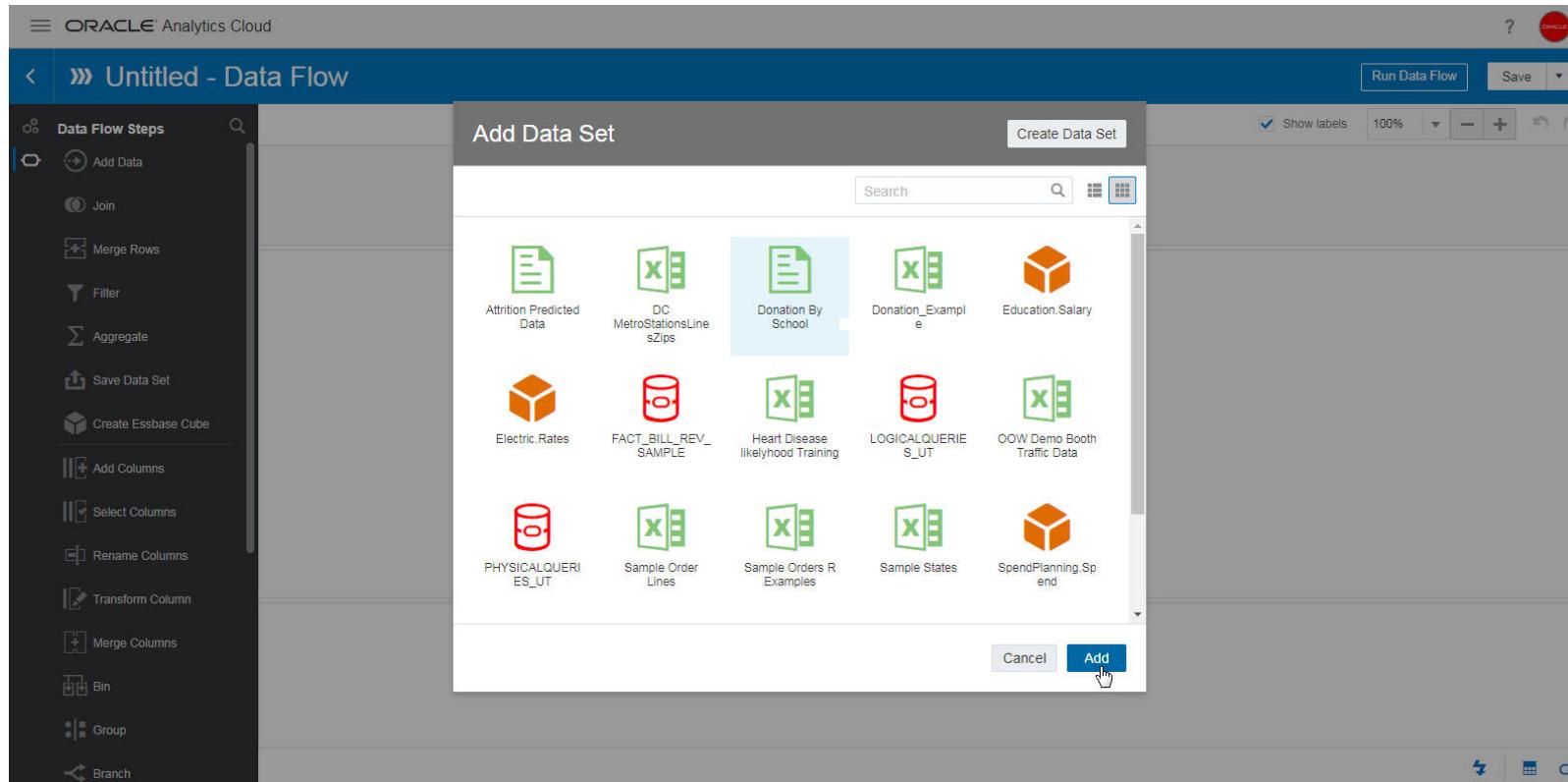
UsageTracking_Sam... Project

LOGICALQUERIES_UT Database

Tip: Create a new Data Set by simply dropping your file anywhere on this page

From our home page, lets
“Create” -> “Data Flow”

Assignment Screens: Create multiple target outputs with Data Flow



The first step is always to add a source data set for a data flow.

Lets select the DS, “Donation by School”

Click Add

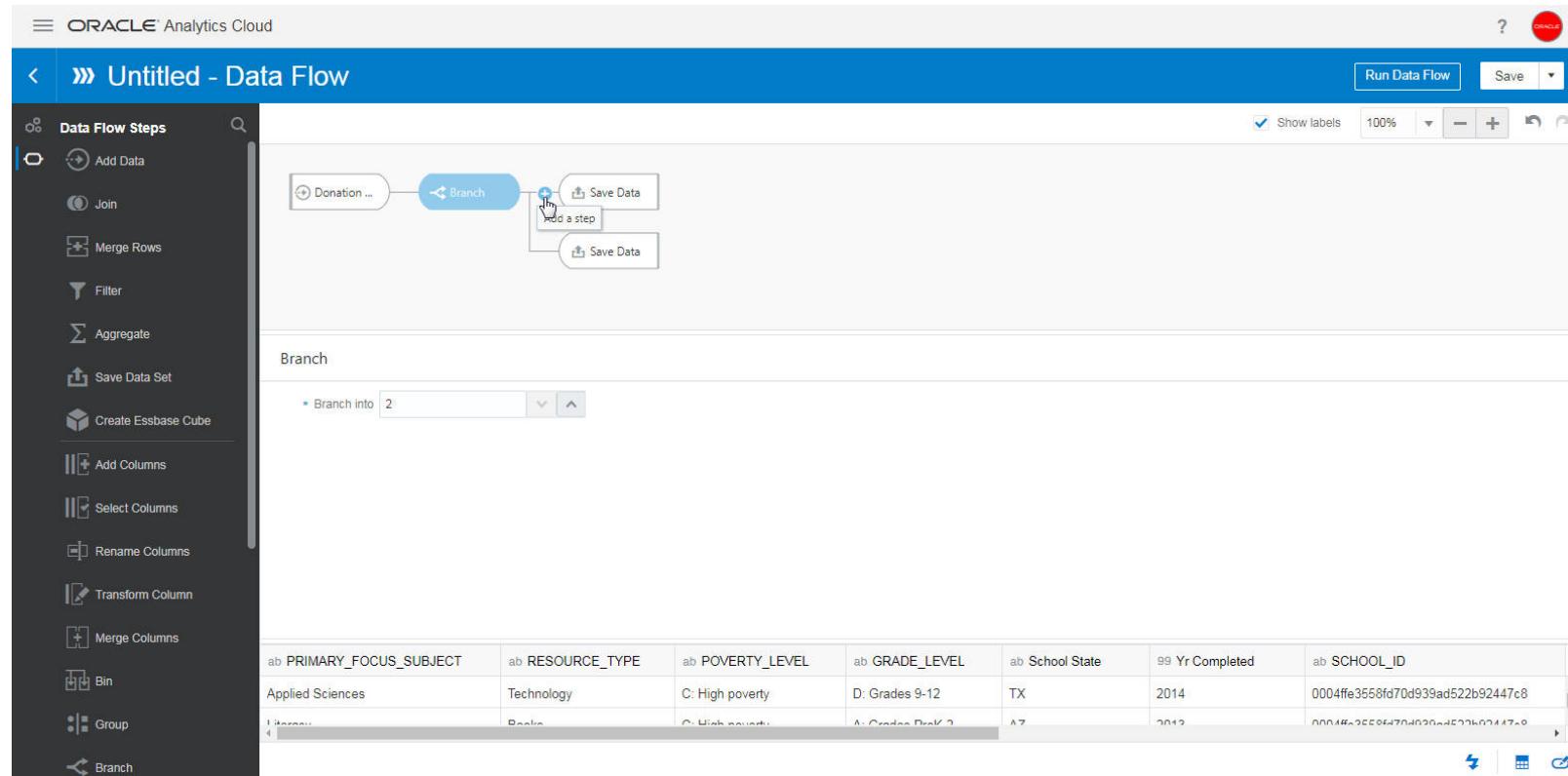
Assignment Screens: Create multiple target outputs with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. On the left, there's a sidebar with various steps: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main area shows a step titled "Donation ..." with a tooltip pointing to the "Branch" icon. Below the step, there are sections for "Add Data - Donation" and "Description". The "Add Data - Donation" section includes icons for Add Data, Join, Merge Rows, Filter, Aggregate, Save Data, and Create Essbase Cube. The "Description" section includes icons for Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, Branch, Cumulative Value, Time Series Forecast, Analyze Sentiment, Train Numeric Prediction, Train Multi-Classifier, Train Binary Classifier, Train Clustering, and Apply Model. At the bottom, there are two checked boxes: "GRADE_LEVEL" and "School State". A preview table shows data for PRIMARY_FOCUS SUBJECT, RESOURCE_TYPE, POVERTY LEVEL, GRADE LEVEL, School State, Yr Completed, and SCHOOL ID.

| ab PRIMARY_FOCUS_SUBJECT | ab RESOURCE_TYPE | ab POVERTY_LEVEL | ab GRADE_LEVEL | ab School State | 99 Yr Completed | ab SCHOOL_ID |
|--------------------------|------------------|------------------|------------------|-----------------|-----------------|----------------------------------|
| Applied Sciences | Technology | C: High poverty | D: Grades 9-12 | TX | 2014 | 0004ffe3558fd70d939ad522b92447c8 |
| Literacy | Books | C: High poverty | A: Grades PreK-2 | AZ | 2013 | 0004ffe3558fd70d939ad522b92447c8 |

Lets click “+” icon to add a step, and select “Branch”

Assignment Screens: Create multiple target outputs with Data Flow

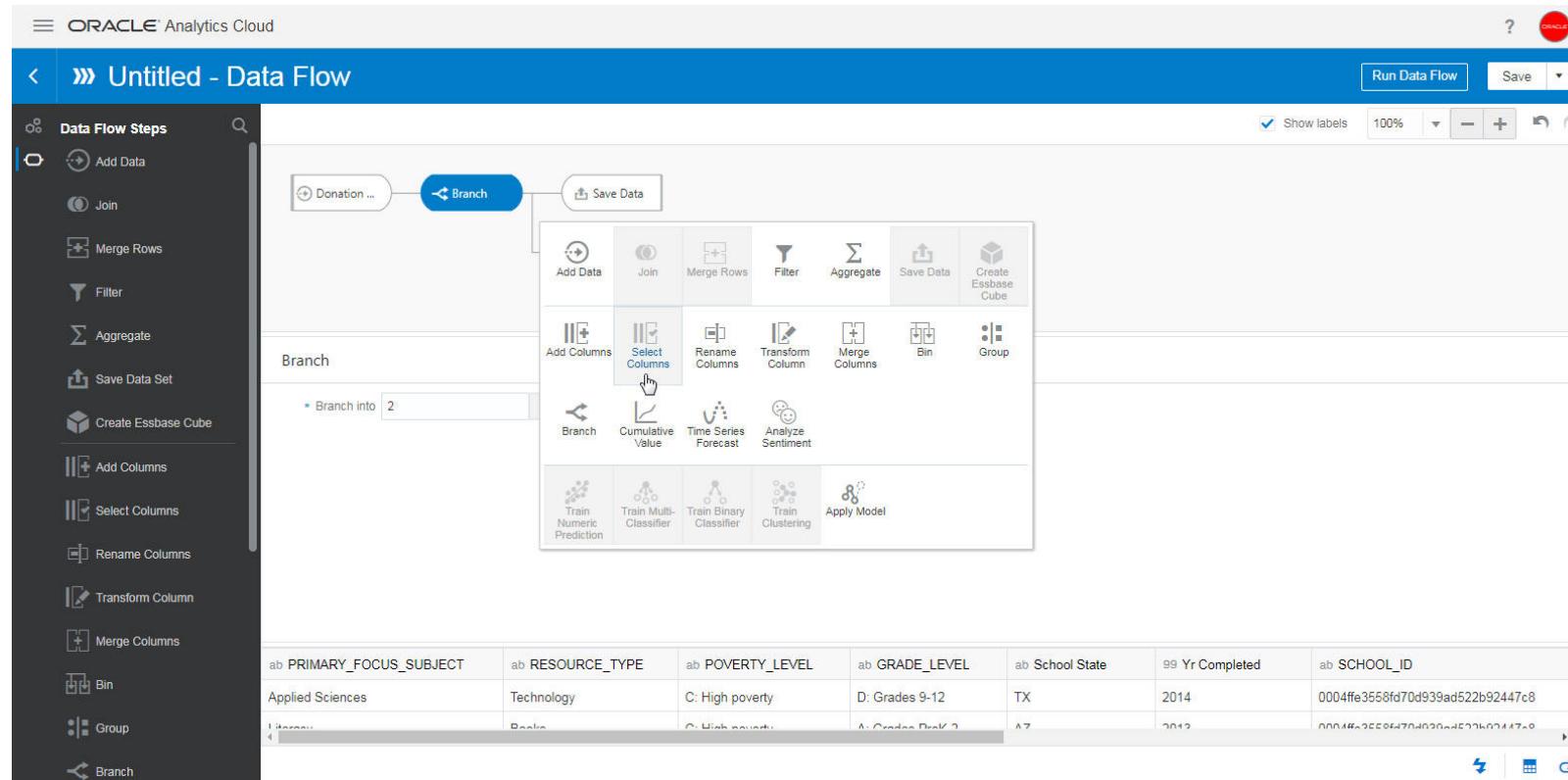


Between “Branch” and “Save Data”, you can add steps.

For the first Branch, lets add a Step

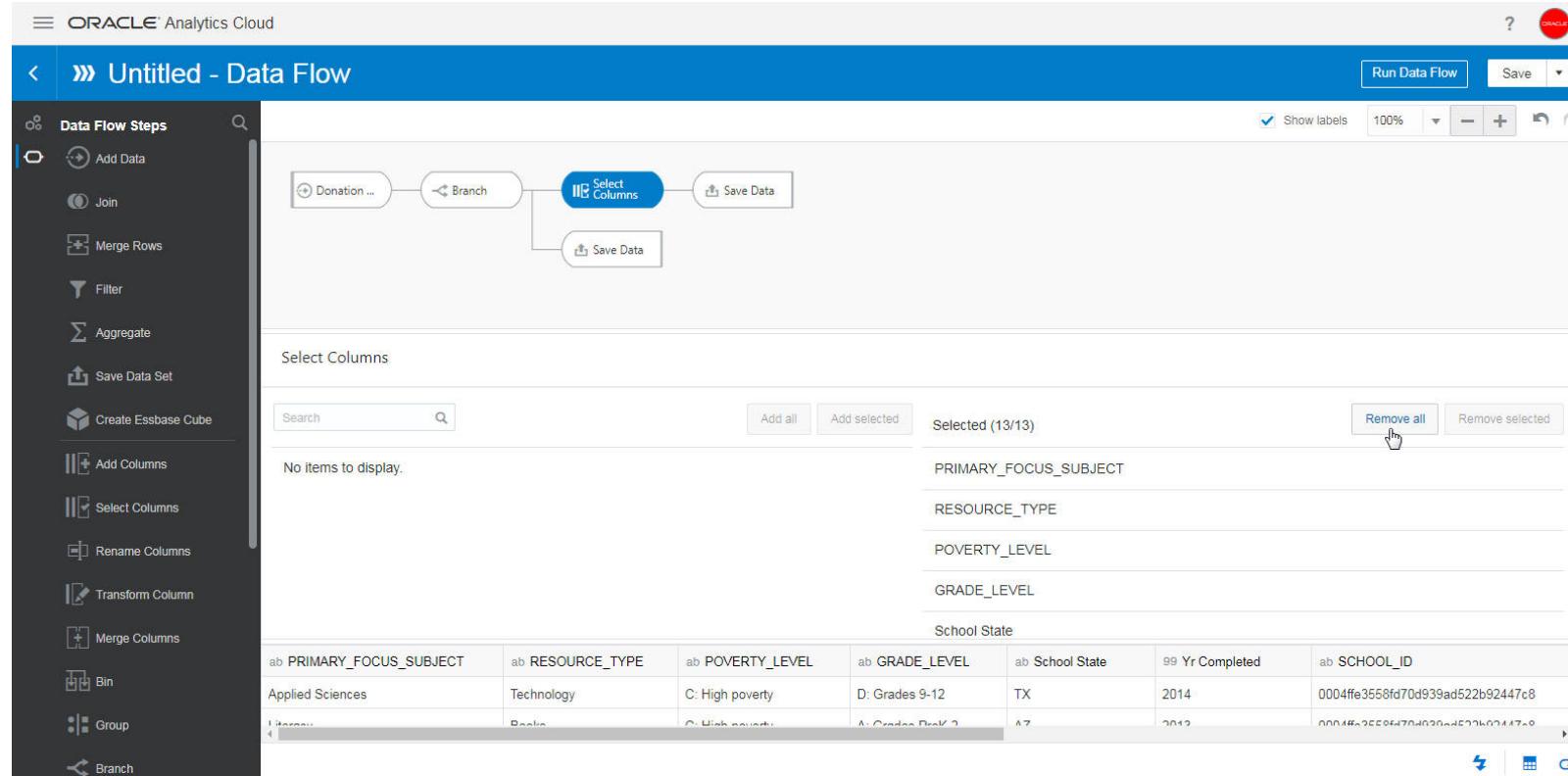
Assignment Screens: Create multiple target outputs with Data Flow

In the step, lets “Select Columns”

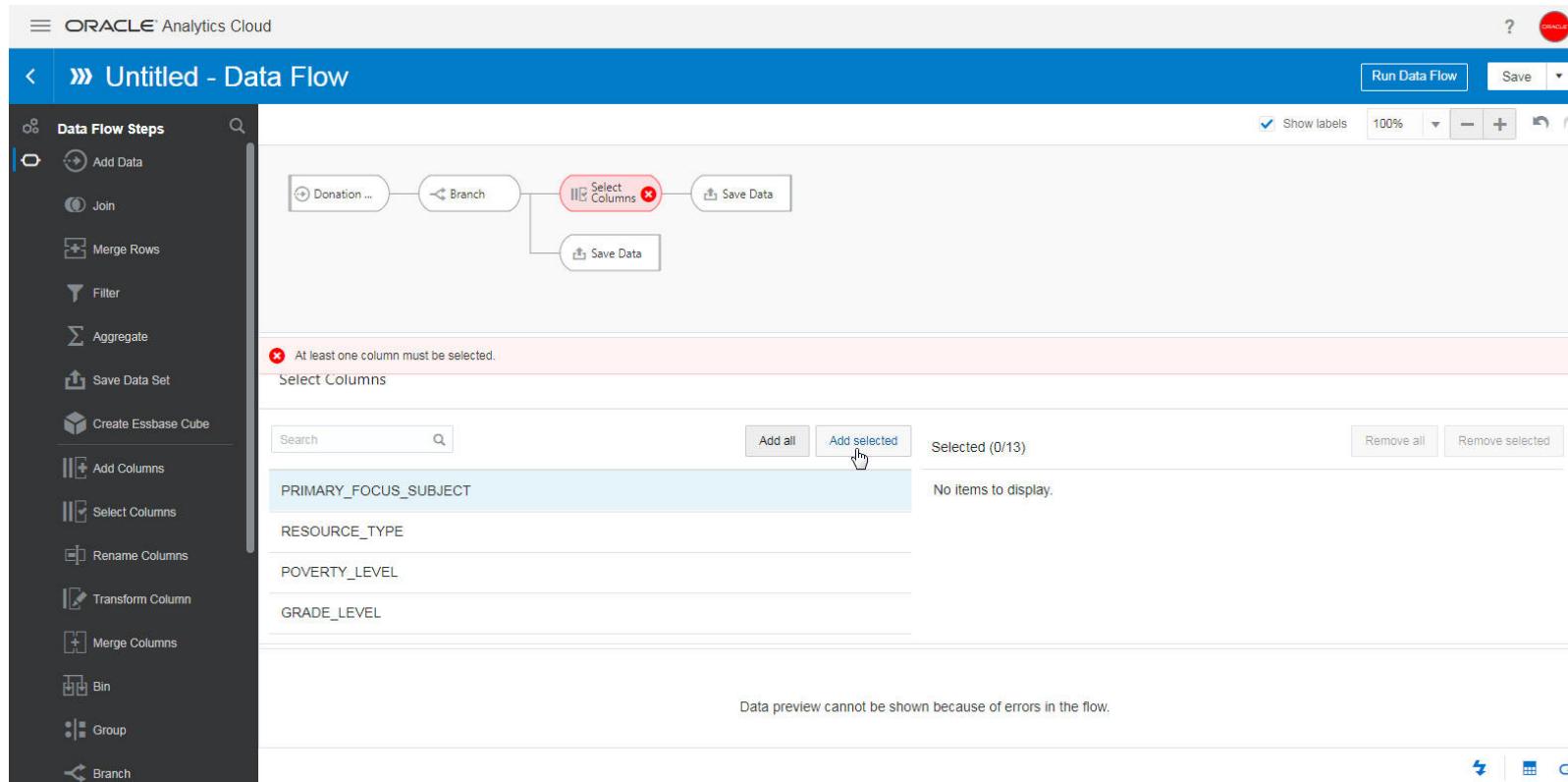


Assignment Screens: Create multiple target outputs with Data Flow

We remove all columns



Assignment Screens: Create multiple target outputs with Data Flow

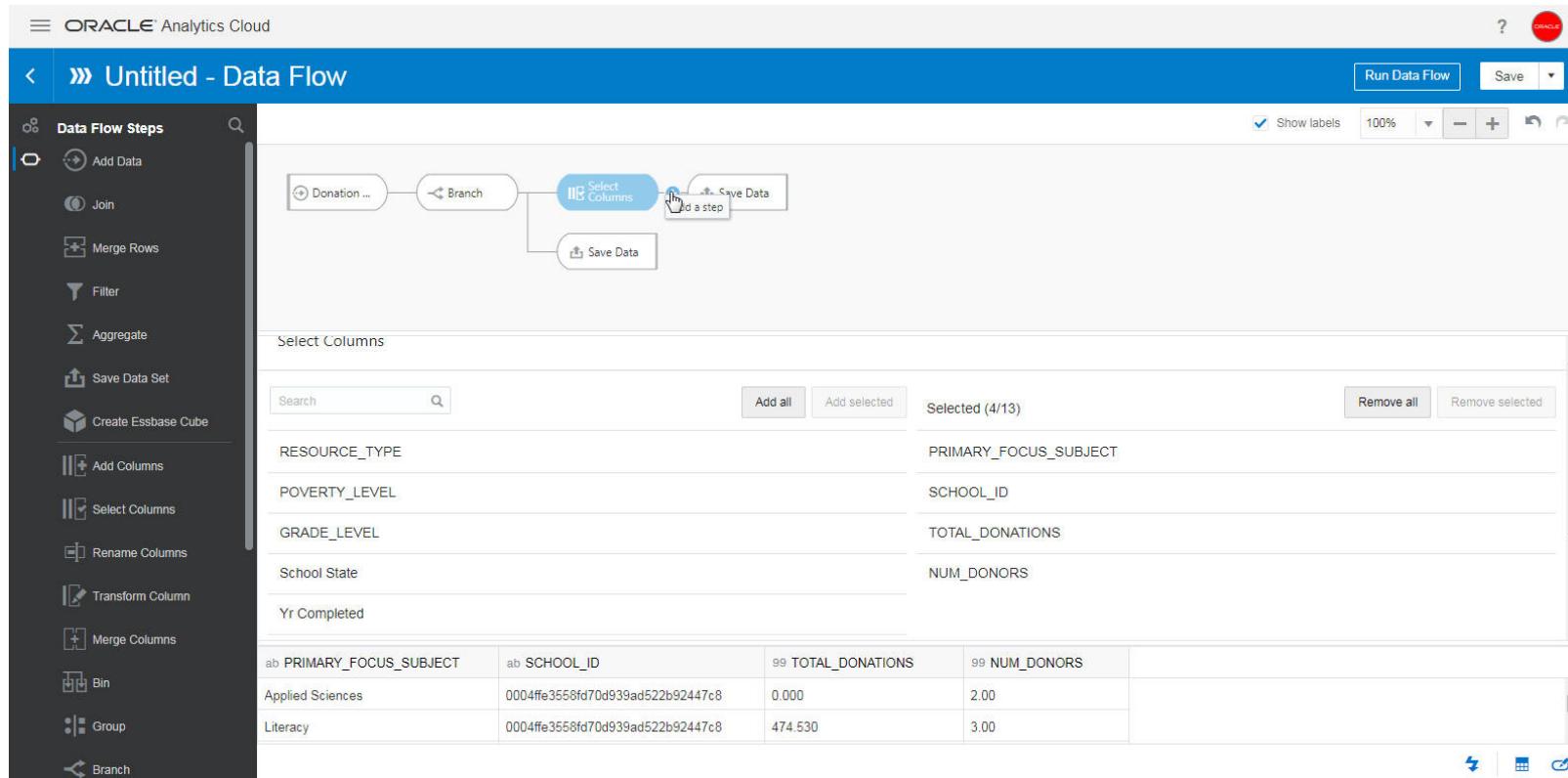


Select the following columns:

PRIMARY_FOCUS_SUBJECT
SCHOOL_ID
TOTAL_DONATIONS
NUM_DONORS

Click on “Add Selected”

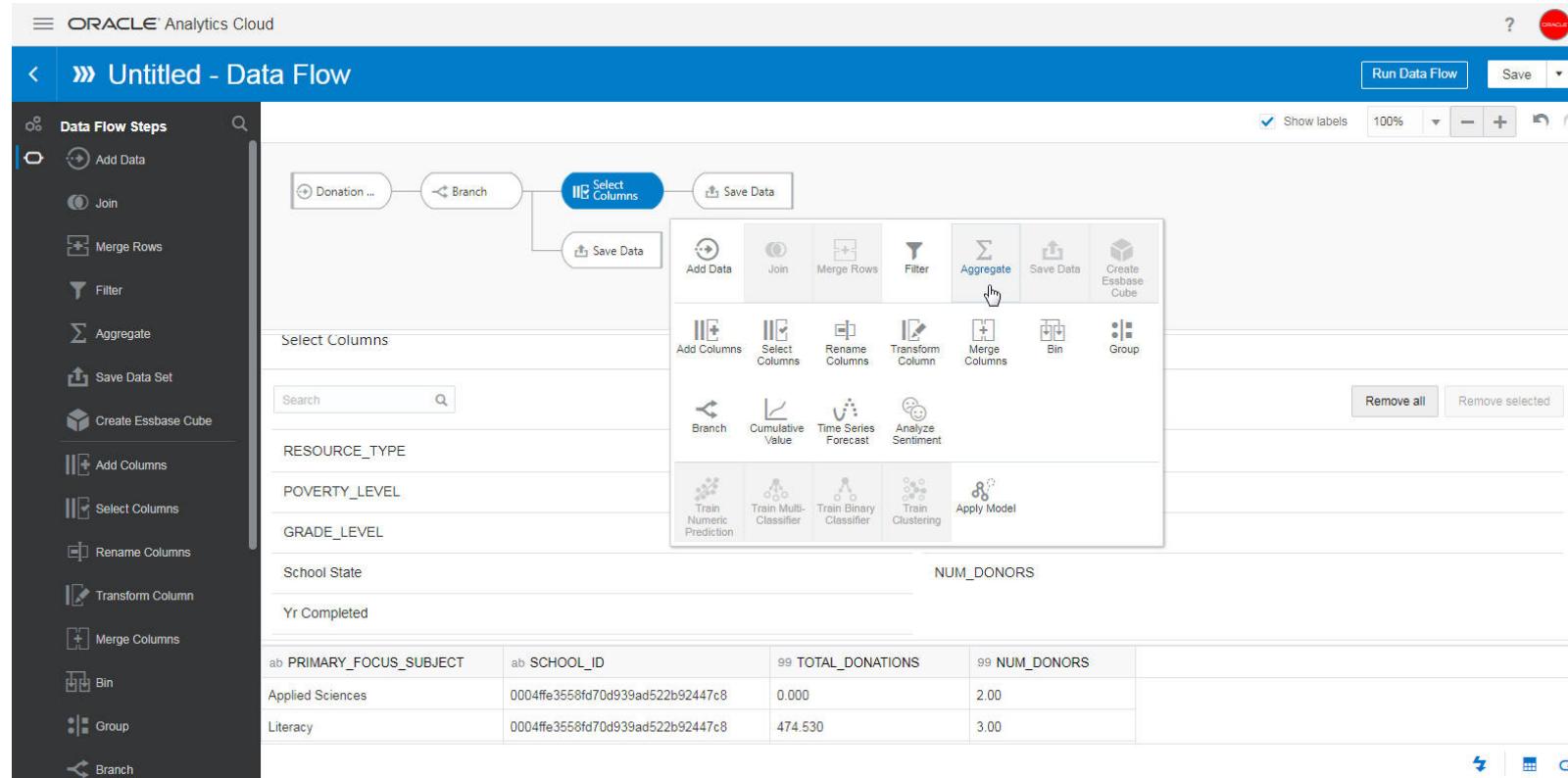
Assignment Screens: Create multiple target outputs with Data Flow



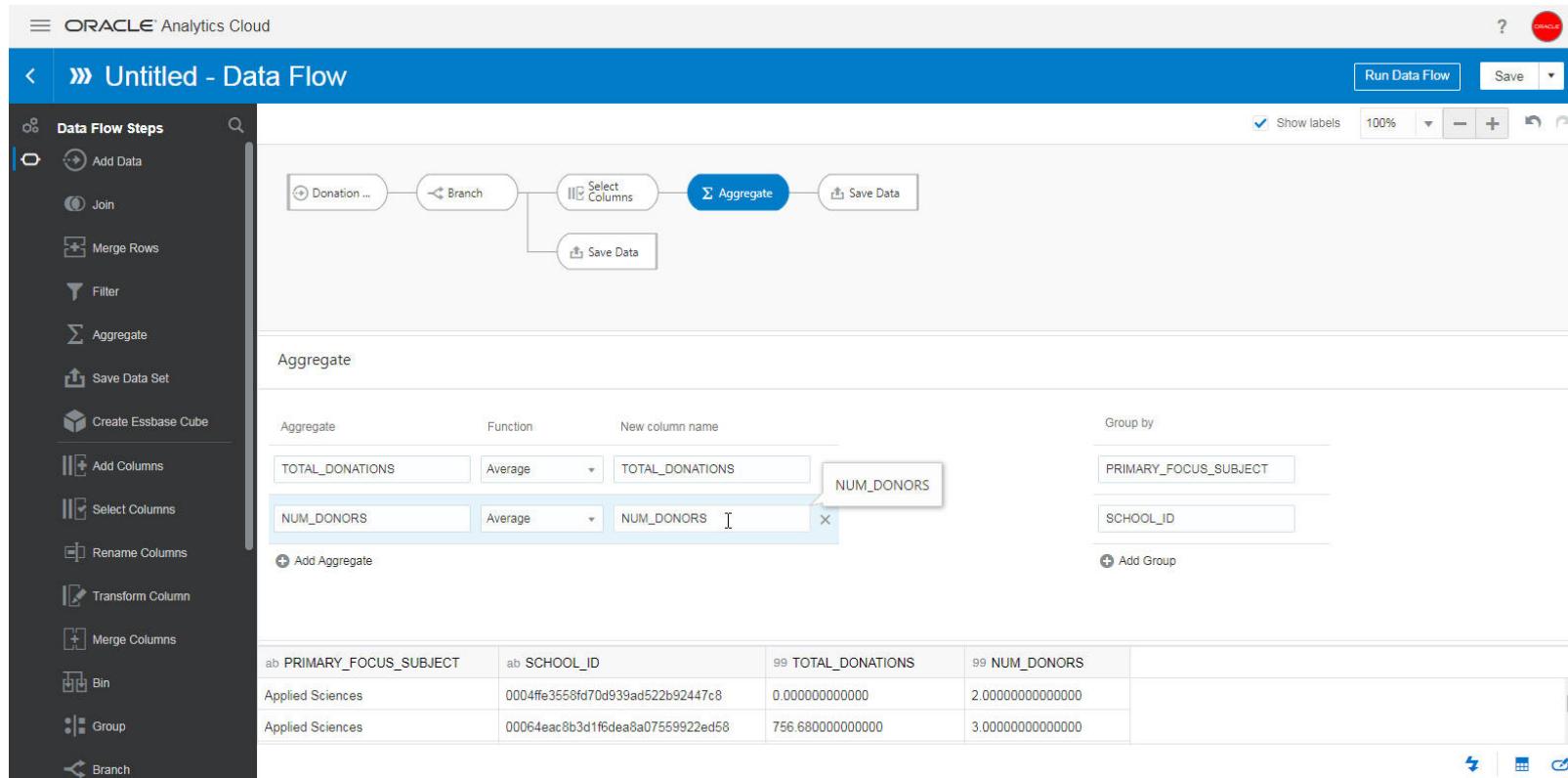
In between “Select Columns” and “Save Data” for the First Branch, Lets Add a step

Assignment Screens: Create multiple target outputs with Data Flow

Lets Aggregate

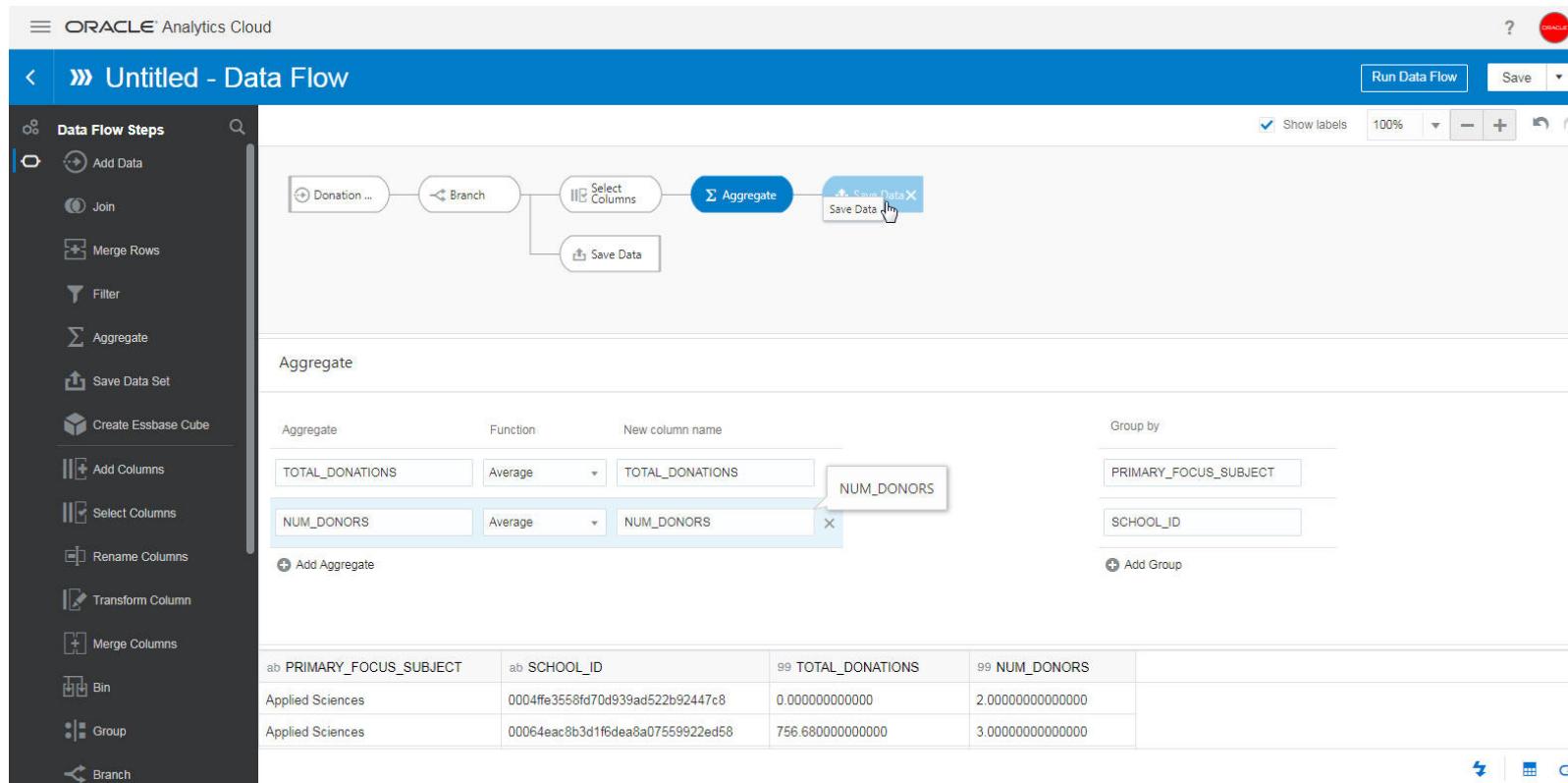


Assignment Screens: Create multiple target outputs with Data Flow



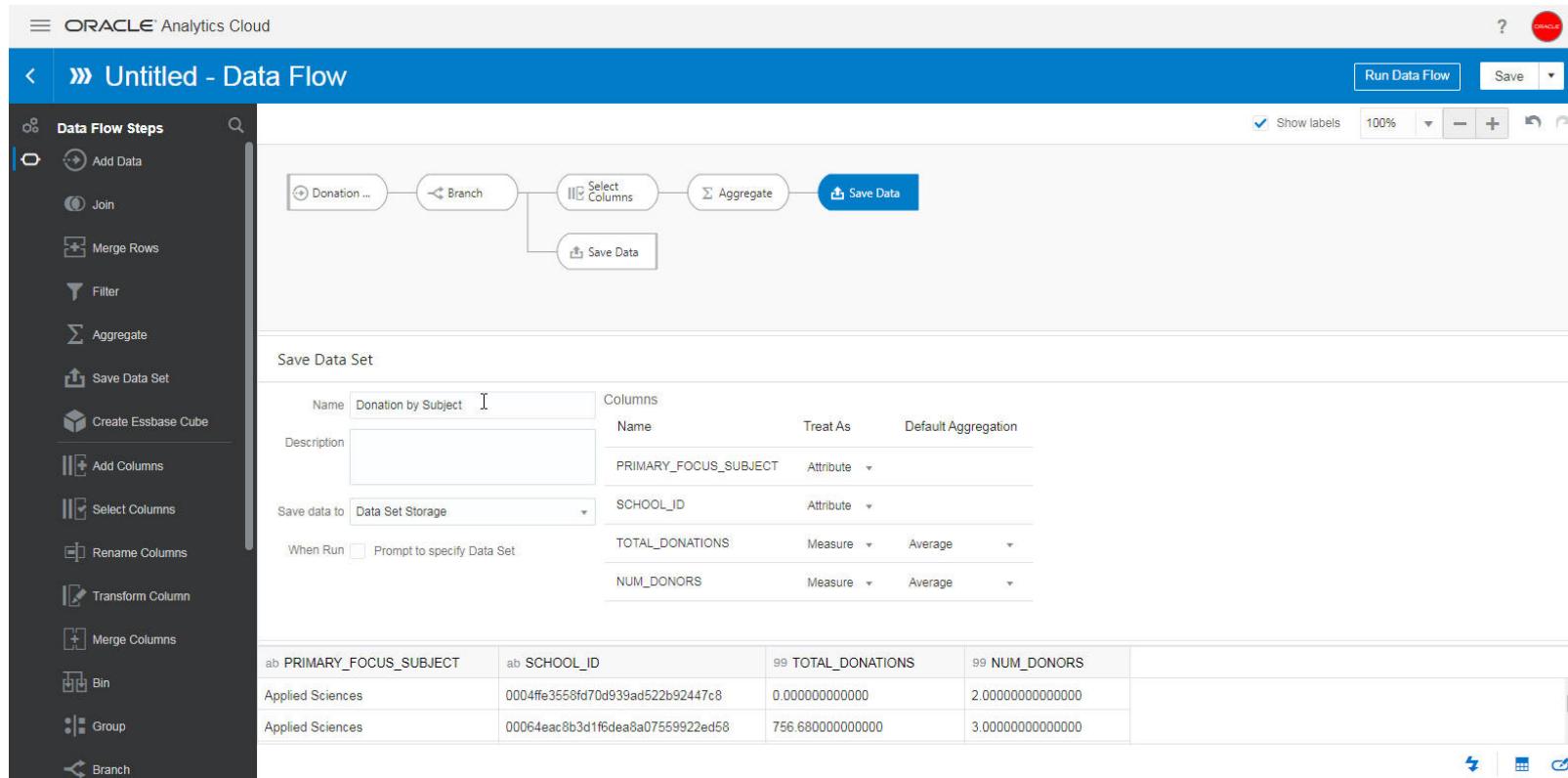
Lets Choose the appropriate Aggregate Functions, and name the aggregated columns appropriately.

Assignment Screens: Create multiple target outputs with Data Flow



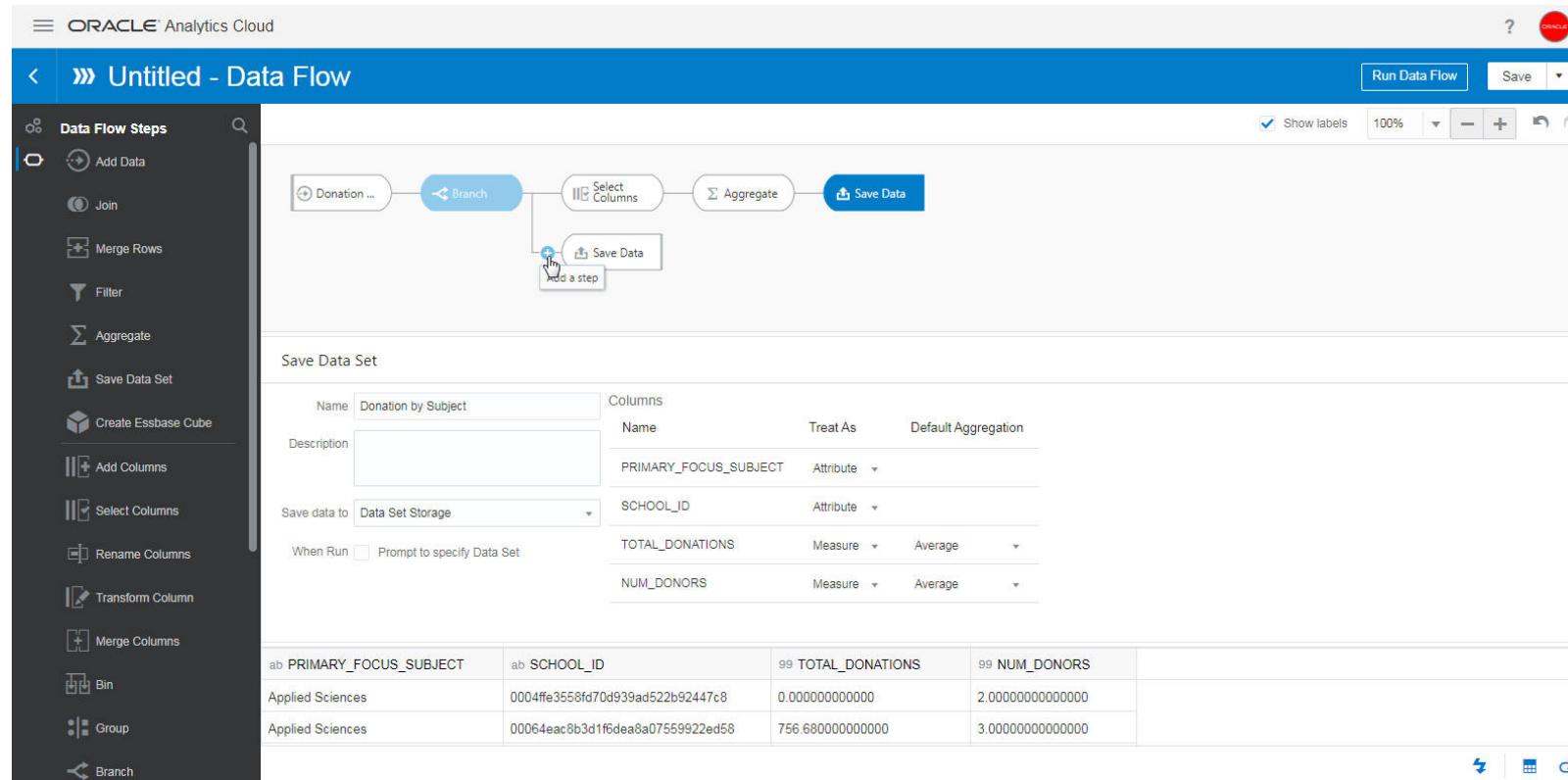
For the first Brach, now click on
“Save Data”

Assignment Screens: Create multiple target outputs with Data Flow



Give an meaningful name to the Data Set, say “Donation by Subject”

Assignment Screens: Create multiple target outputs with Data Flow

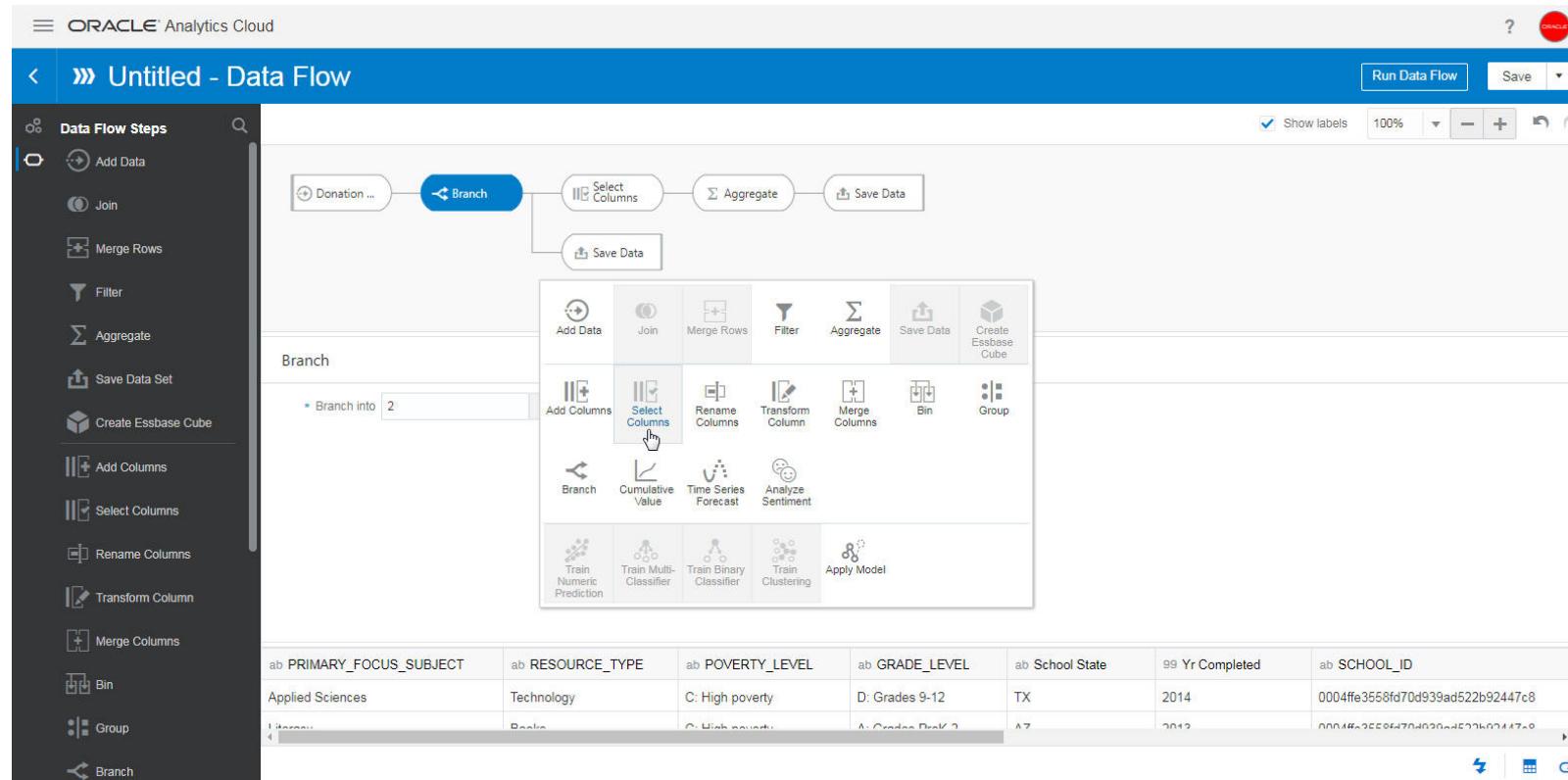


Between “Branch” and “Save Data”, you add steps.

For the second Branch, lets add a Step

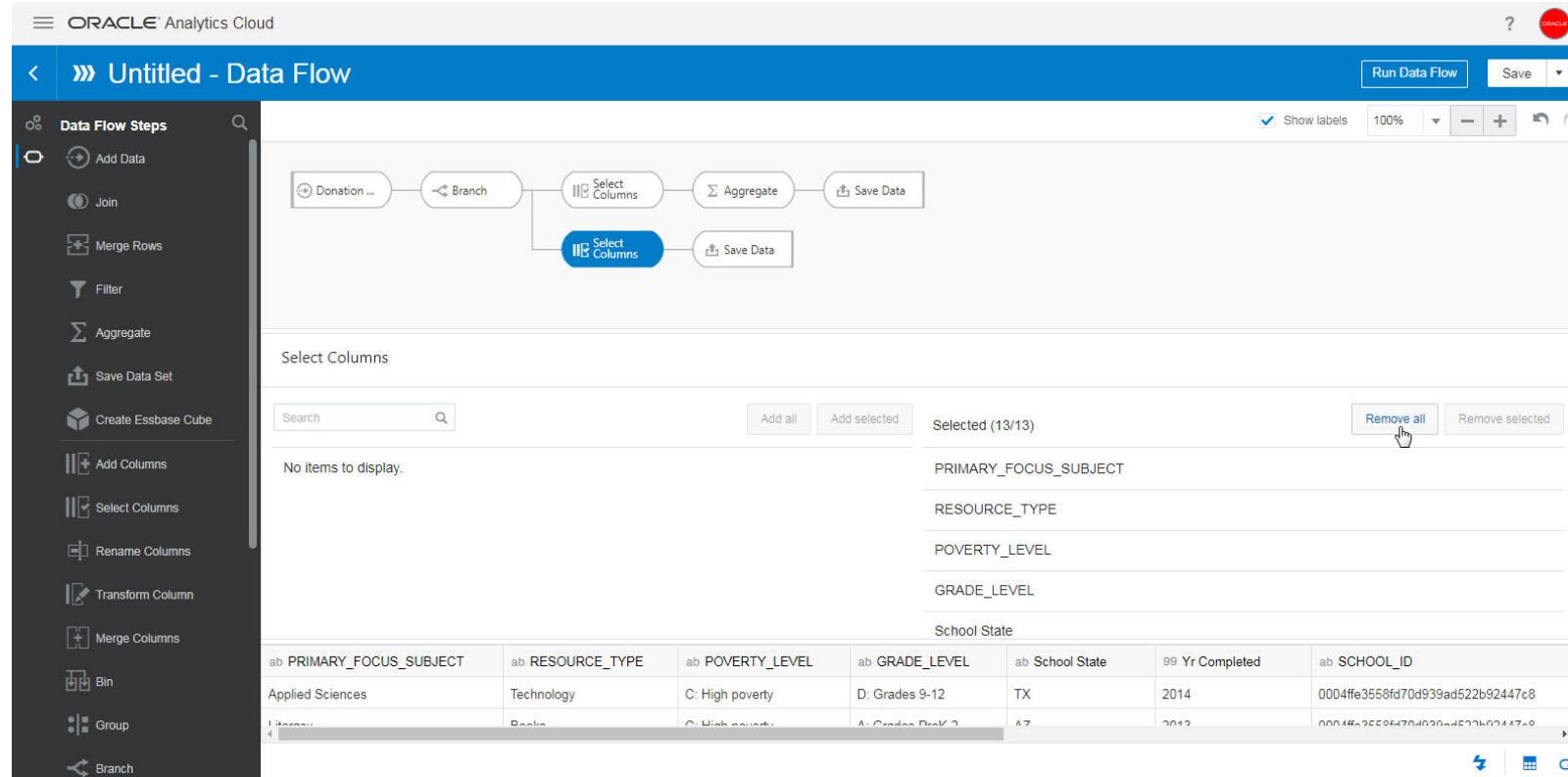
Assignment Screens: Create multiple target outputs with Data Flow

In the step, lets “Select Columns”

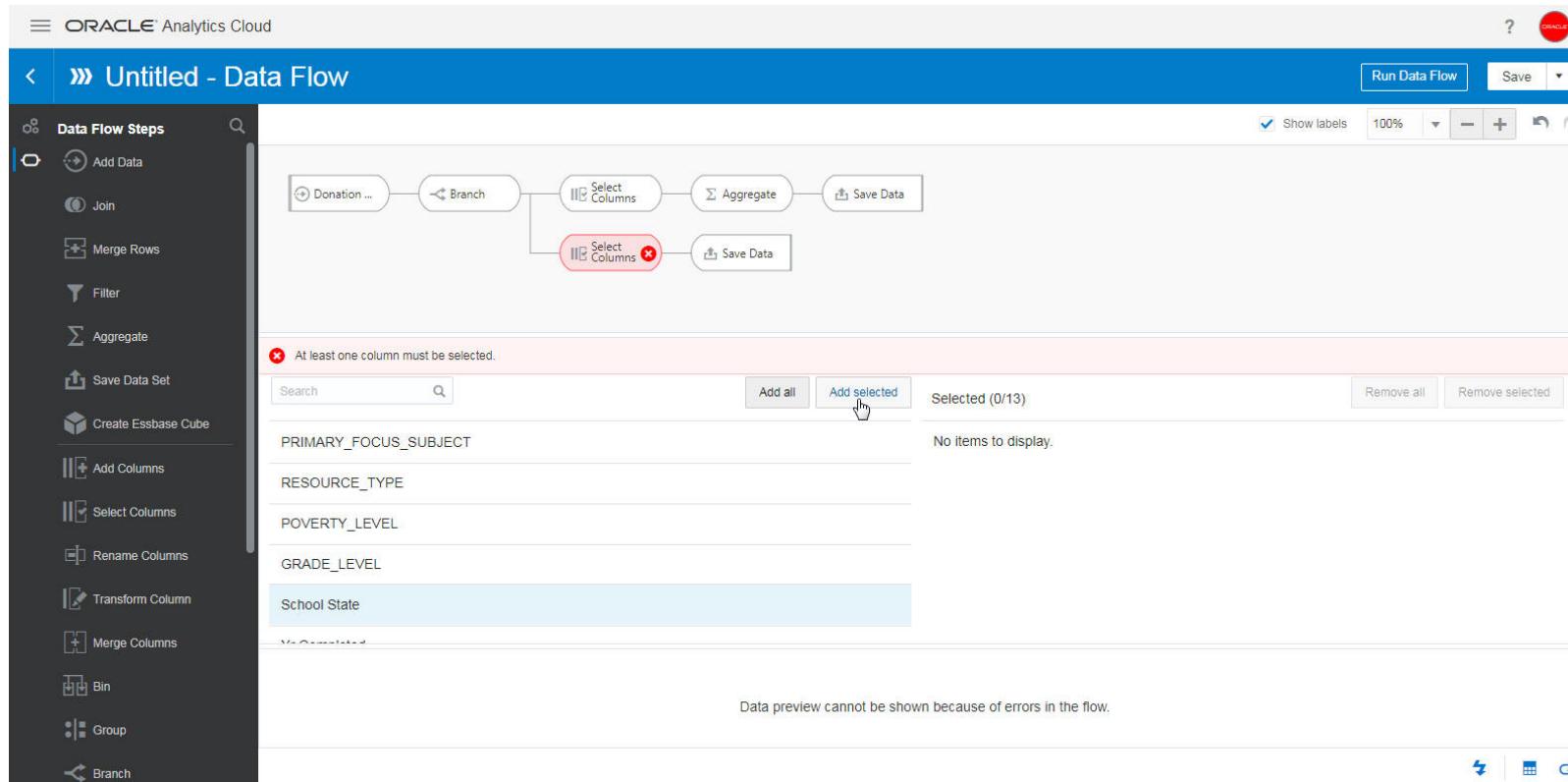


Assignment Screens: Create multiple target outputs with Data Flow

We remove all columns



Assignment Screens: Create multiple target outputs with Data Flow



Select the following columns:

School State

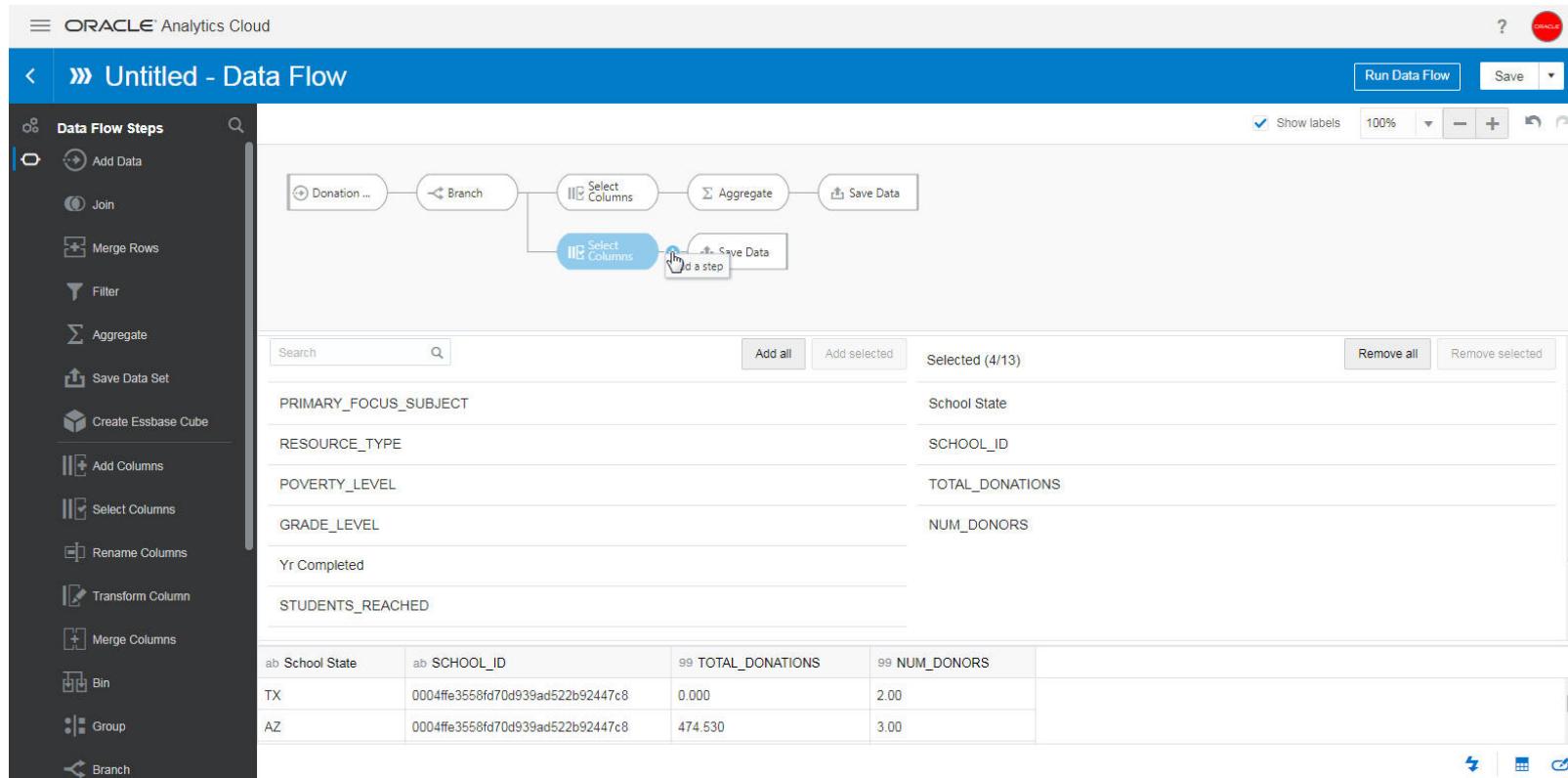
SCHOOL_ID

TOTAL_DONATIONS

NUM_DONORS

Click on “Add Selected”

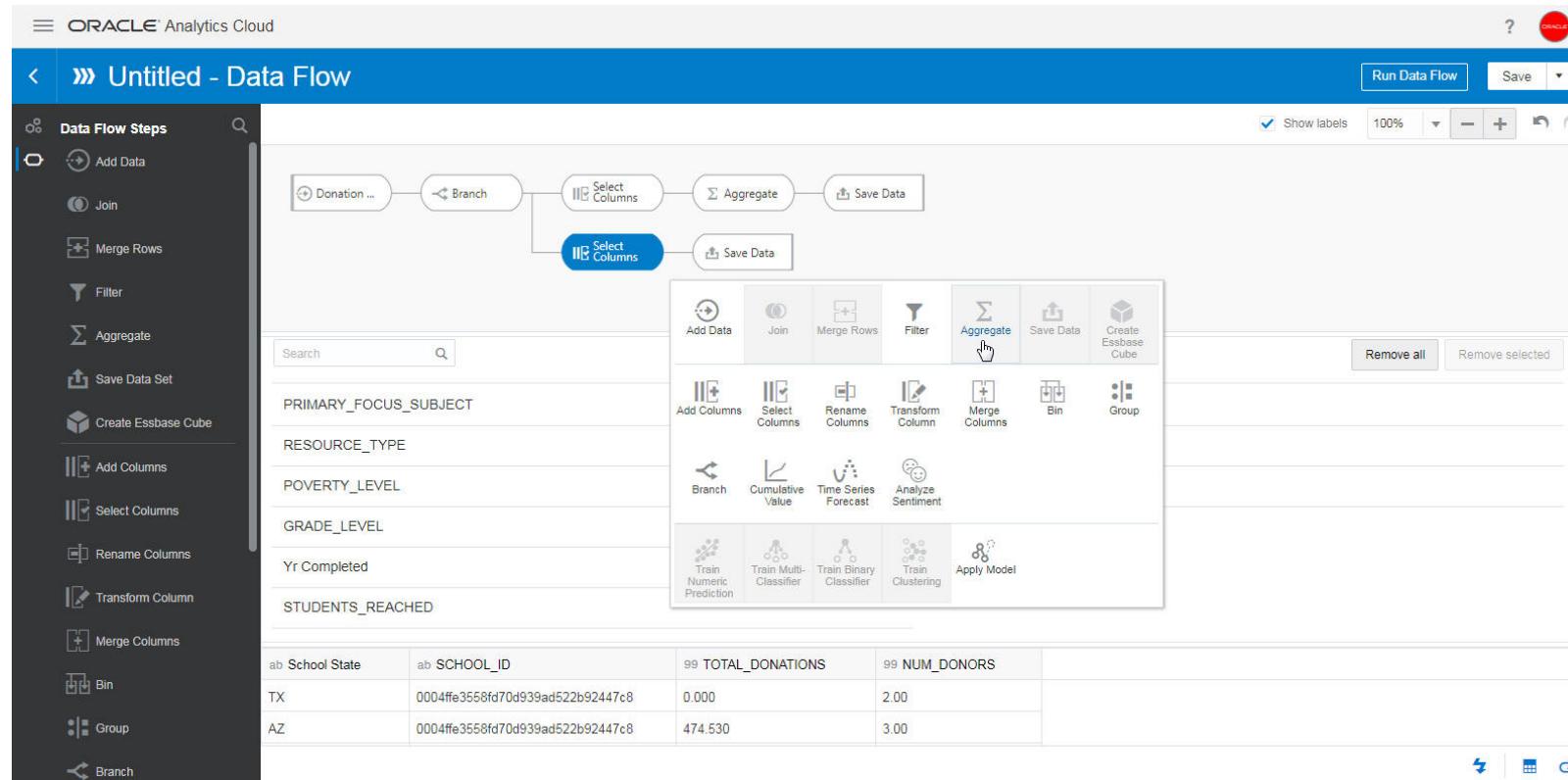
Assignment Screens: Create multiple target outputs with Data Flow



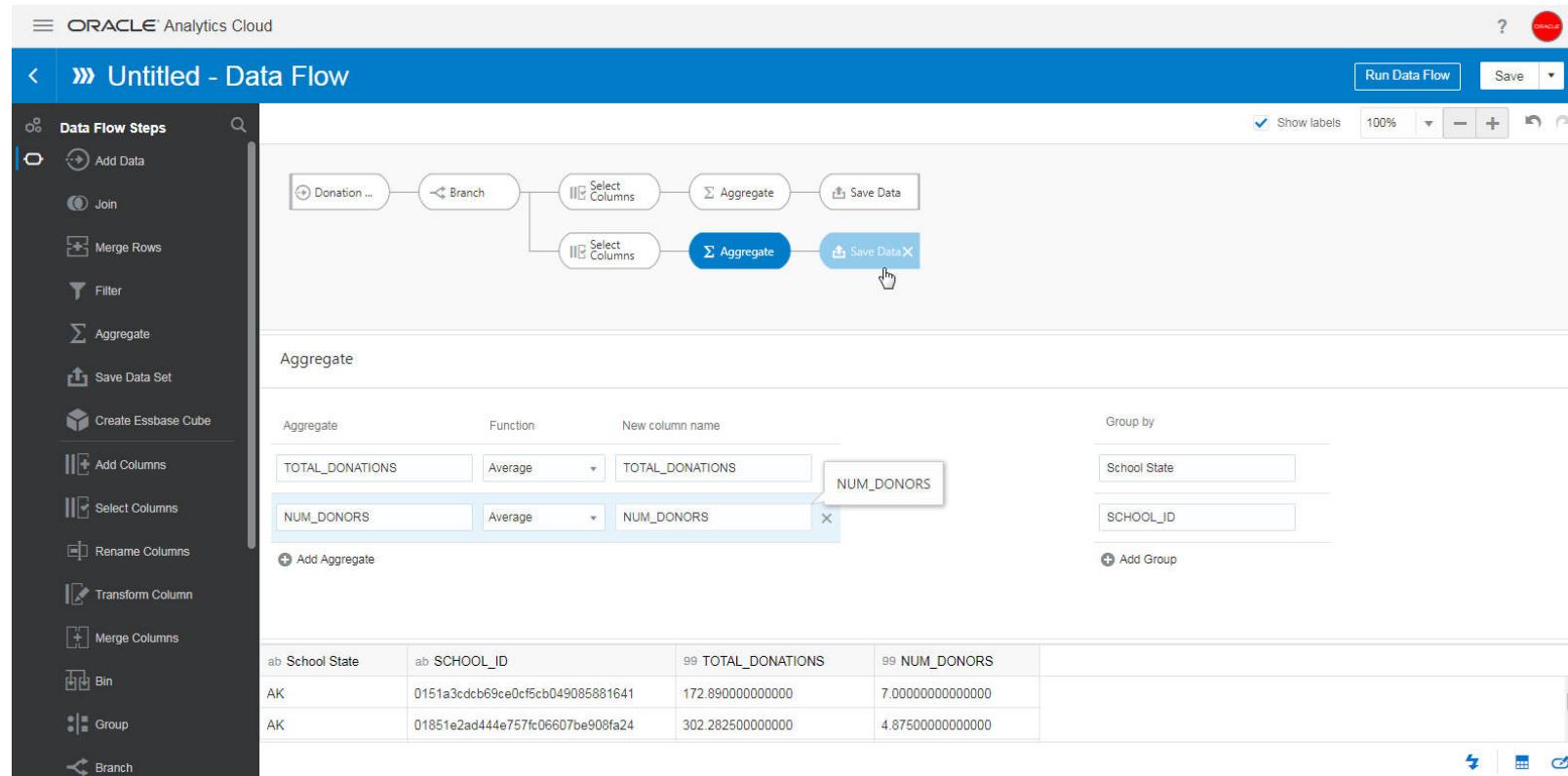
In between “Select Columns” and “Save Data” for the second Branch, Lets Add a step

Assignment Screens: Create multiple target outputs with Data Flow

Lets Aggregate



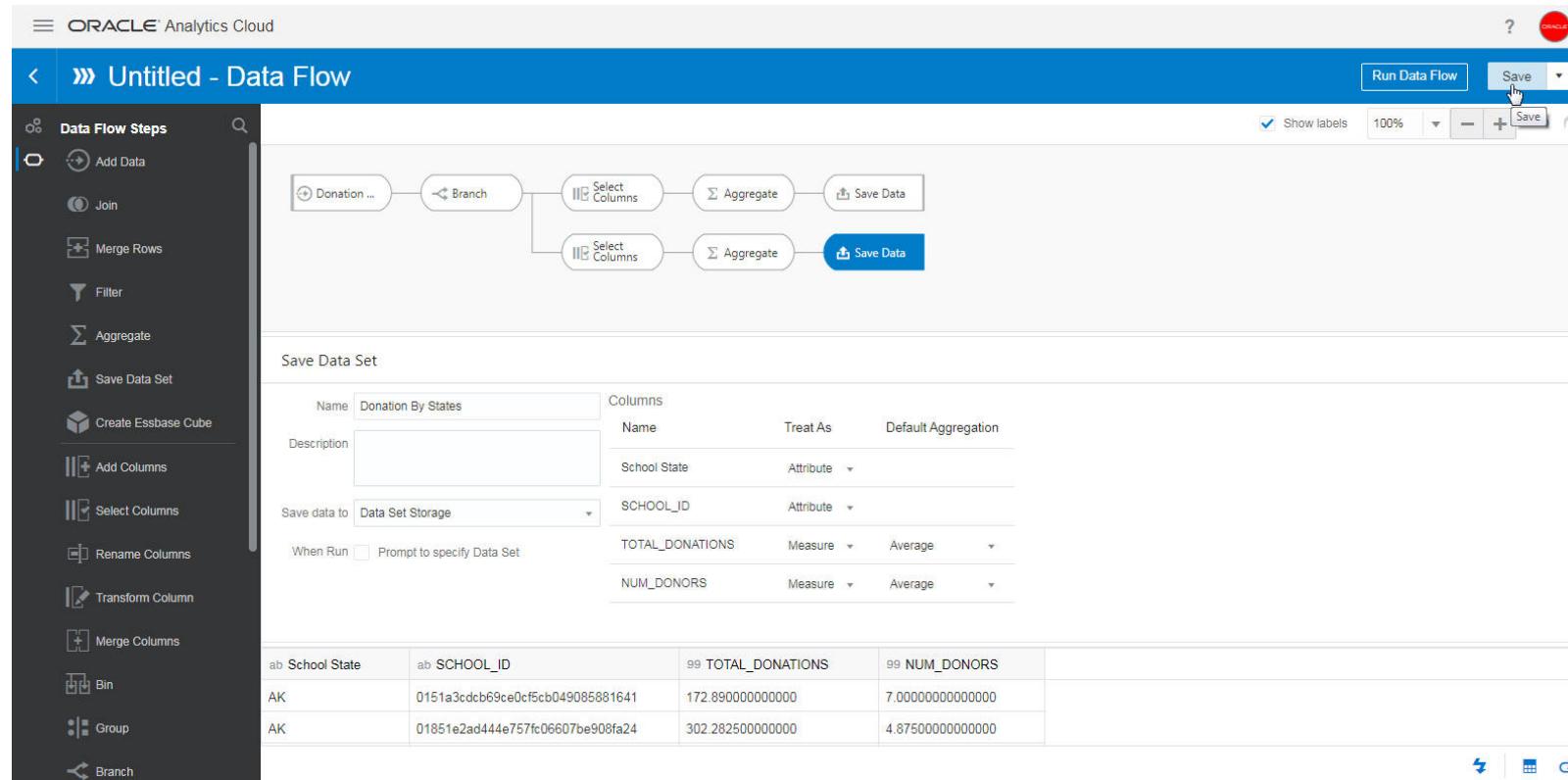
Assignment Screens: Create multiple target outputs with Data Flow



Lets Choose the appropriate Aggregate Functions, and name the aggregated columns appropriately.

For the second Brach, now click on “Save Data”

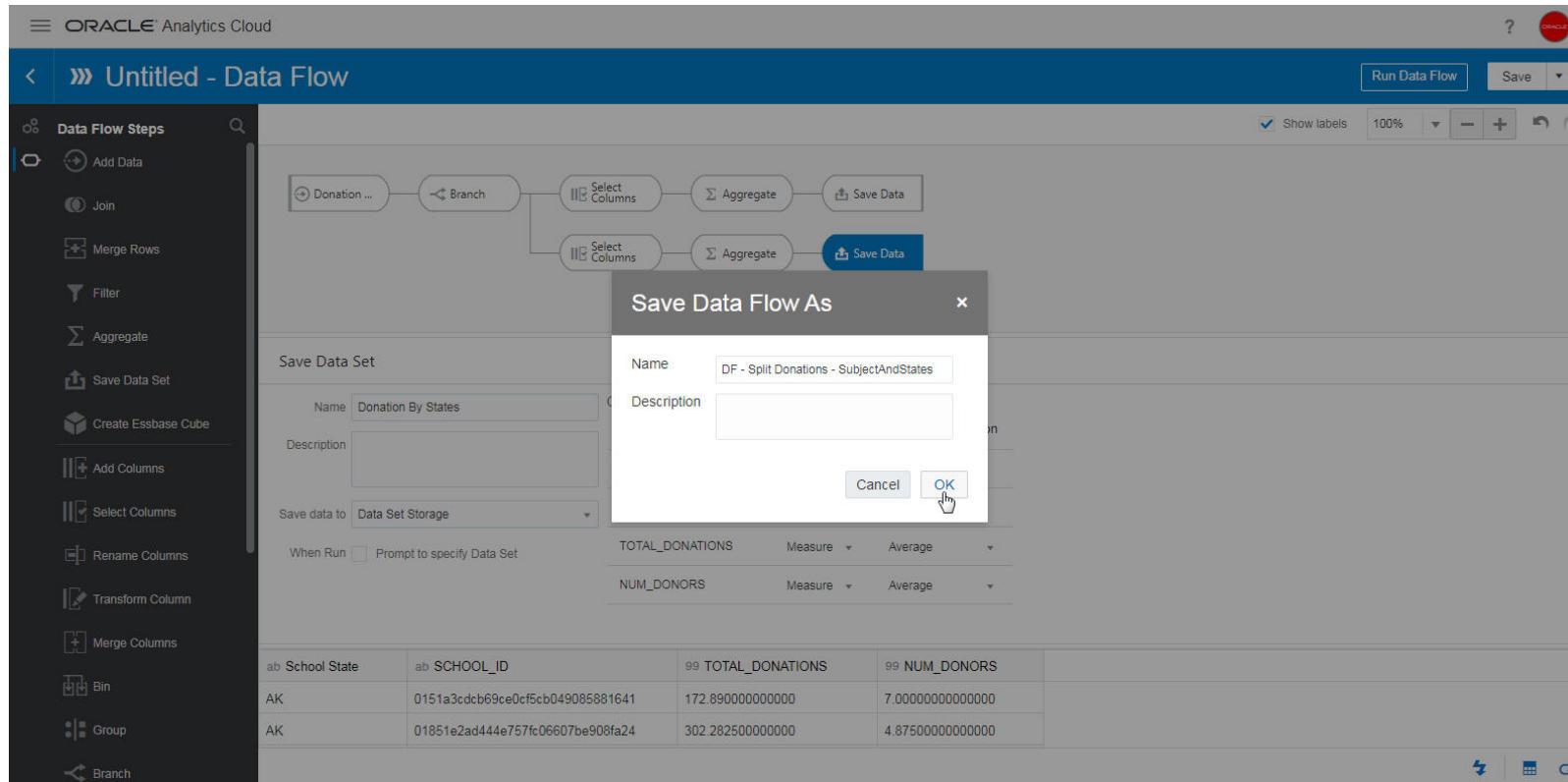
Assignment Screens: Create multiple target outputs with Data Flow



Name the second data set as
“Donation by States”

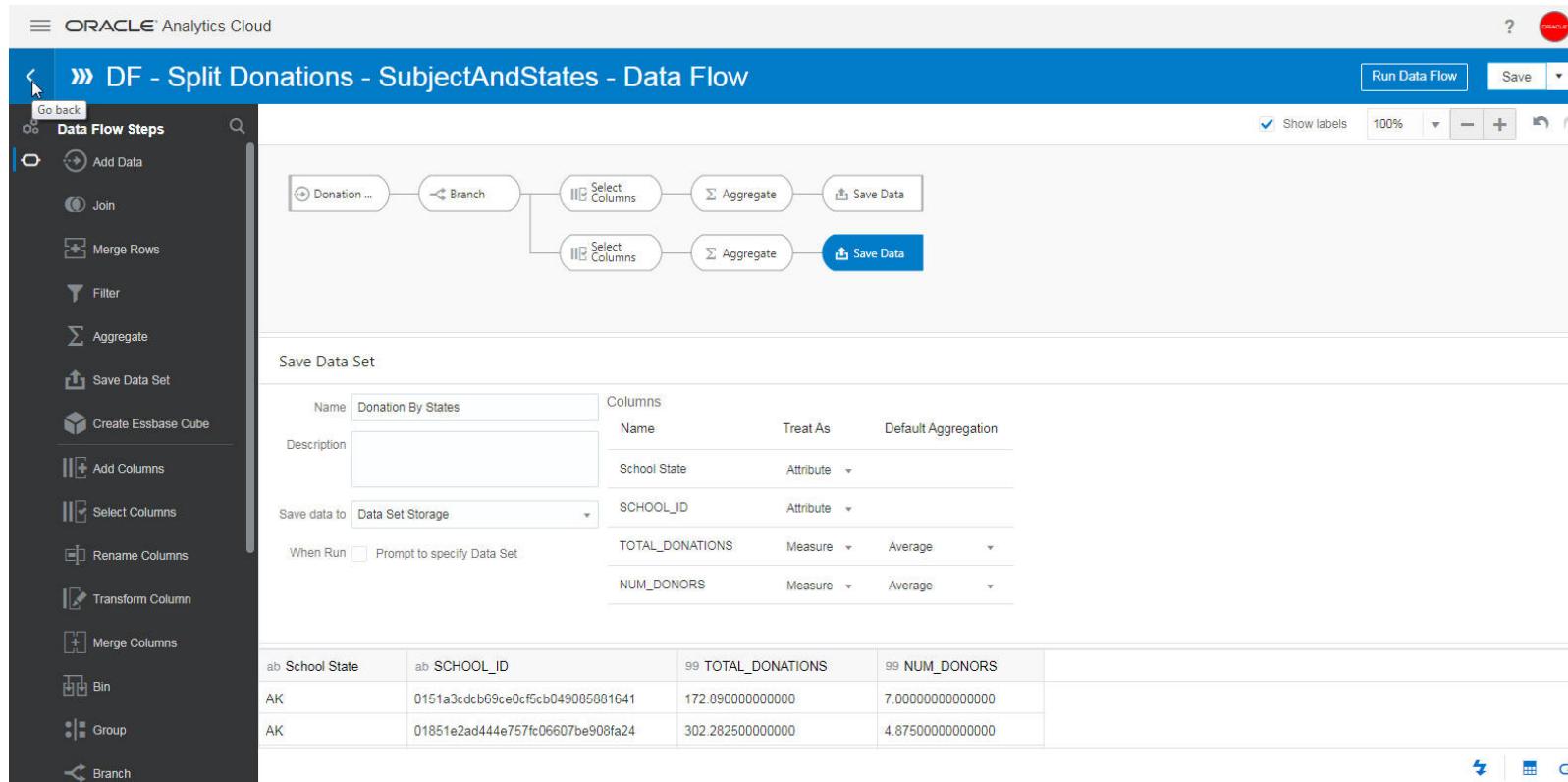
Click on the “Save” Button at the
top, to save the Data Flow.

Assignment Screens: Create multiple target outputs with Data Flow



Name the Data Flow as “DF – Split Donations – Subject And States”

Assignment Screens: Create multiple target outputs with Data Flow



Now Lets Go Back, Click on the "Go Back", icon on the top left.

Assignment Screens: Create multiple target outputs with Data Flow

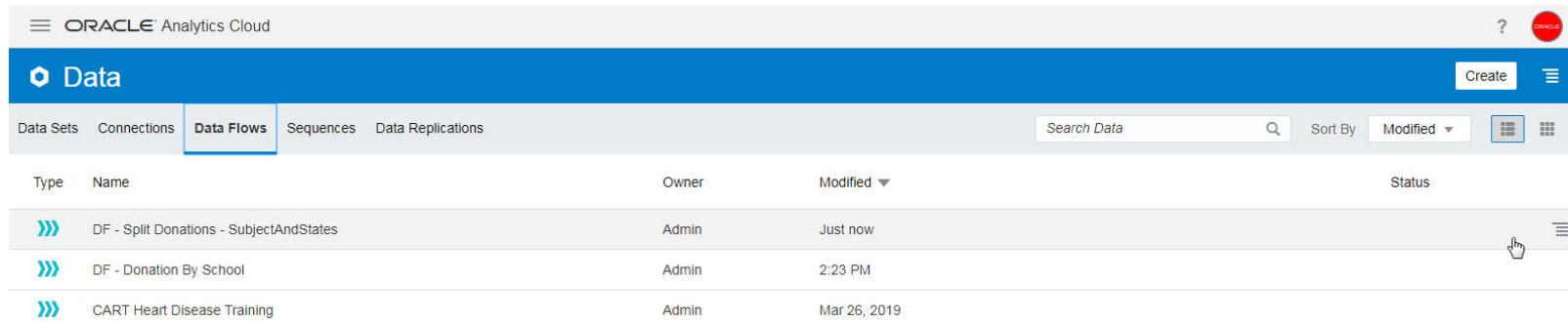
The screenshot shows the Oracle Analytics Cloud Home screen. The left sidebar has a dark theme with icons for Home, Projects, Data (which is highlighted with a blue selection bar), Machine Learning, Jobs, Console, and Academy. The main area is titled "Home" with a search bar "What are you interested in?". Below it is a section titled "What's New" featuring several data sets and projects:

- TOTAL_DONATIONS, Population by School State**: A scatter plot showing population vs total donations.
- Donation By School File**: Updated 2:11 PM.
- SpendPlanning.Spend OLAP**: Updated 2:03 PM.
- Sample Project Project**: A dashboard with two bar charts.
- Donations By School Project**: Updated 12:57 PM.
- Zip_Stats File**: Updated 12:17 PM.
- UsageTracking_Sam... Project**: A dashboard with various metrics.
- Education.Salary OLAP**: Updated Yesterday.
- Electric.Rates OLAP**: Updated Yesterday.
- Sample Order Lines File**: Updated Apr 4, 2019.
- Connect to Your Data**: A red button with a cloud icon.

A tip at the bottom says: "Tip: Create a new Data Set by clicking the + icon in the Data tab".

From the Navigator, select “Data” tab

Assignment Screens: Create multiple target outputs with Data Flow



The screenshot shows the Oracle Analytics Cloud interface for managing data flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. A search bar and sorting options are also present. The main content area displays a table of data flows, with columns for Type, Name, Owner, Modified, and Status. Three entries are listed:

| Type | Name | Owner | Modified | Status |
|------|---|-------|--------------|--------|
| »» | DF - Split Donations - SubjectAndStates | Admin | Just now | |
| »» | DF - Donation By School | Admin | 2:23 PM | |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 | |

You now see your newly created data flow.

In this lecture you learnt how to use the “Branch” Feature, remember this as an important tool to split data-sets, into functional areas, as required by analyst.

Thanks for watching !!

Advanced Properties

Run Multiple Data Flows in Sequence !



Section 3: Data Flow Deep Dive with Oracle Analytics

Sequence multiple Data Flows

Execute multiple Data Flows in Sequence

- A sequence is a saved sequential list of specified data flows
- Useful when you want to run multiple data flows as a single transaction
- If any flow within a sequence fails, then all the changes done in the sequence are rolled back
- Run as and when required, or Schedule the run of Sequence, if required with repeat frequency

Assignment Screens: Sequence multiple Data Flows

The screenshot shows the Oracle Analytics Cloud interface. The top navigation bar has 'ORACLE Analytics Cloud'. Below it, a blue header bar says 'Data' with a gear icon. The main menu includes 'Data Sets', 'Connections', 'Data Flows' (which is underlined), 'Sequences', and 'Data Replications'. A search bar 'Search Data' is on the right. The main content area is titled 'Data Flows' and lists three items:

| Type | Name | Owner | Modified |
|------|---|-------|--------------|
| »» | DF - Split Donations - SubjectAndStates | Admin | Just now |
| »» | DF - Donation By School | Admin | 2:23 PM |
| »» | CART Heart Disease Training | Admin | Mar 26, 2019 |

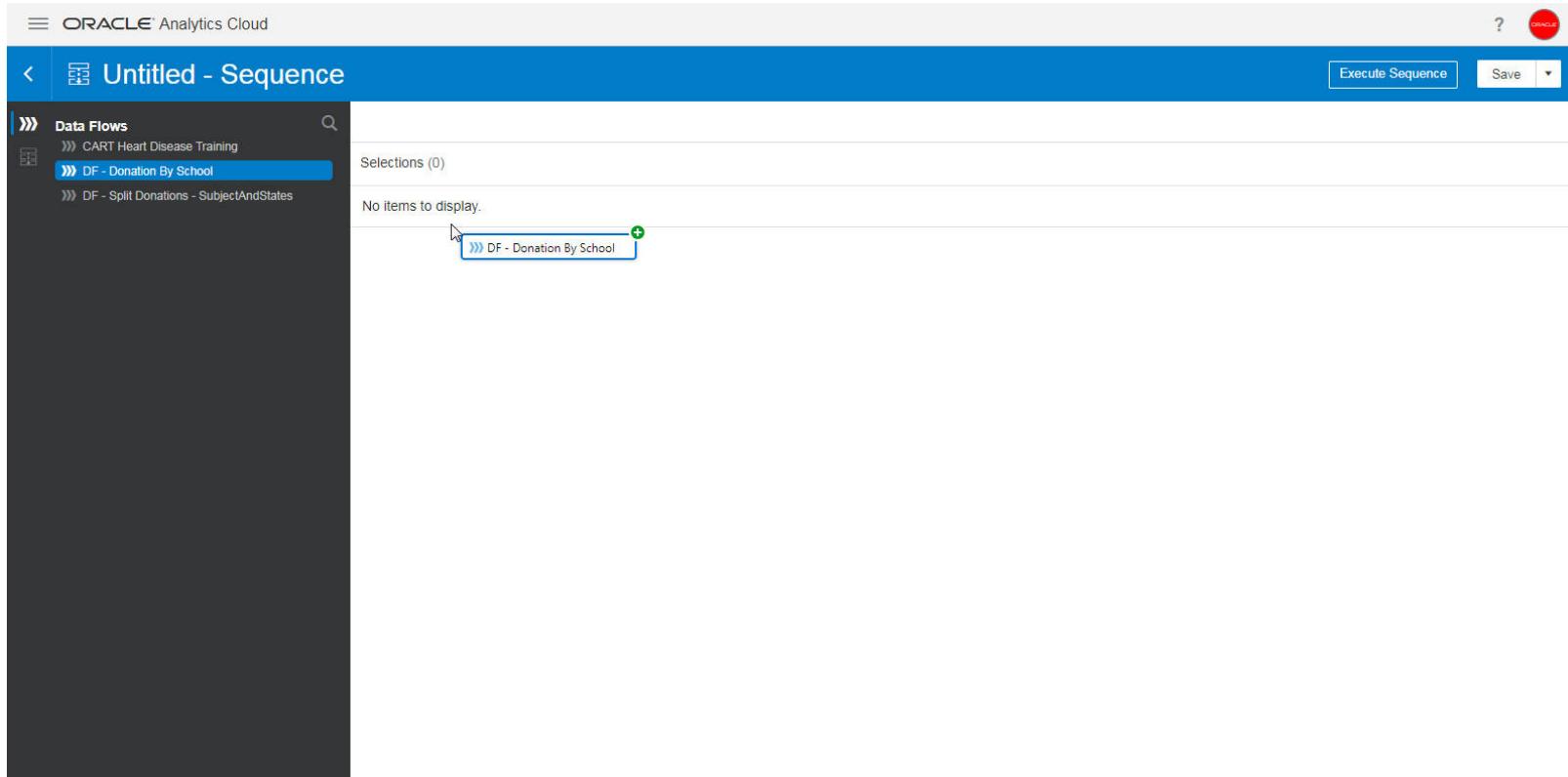
To the right of the list is a 'Create' button with a dropdown menu. The 'Sequence' option is highlighted with a red box and a cursor icon.

You can navigate to the Data flow tab, from “Home” -> “Navigator” -> “Data” -> “Data Flows”, if you are not on the “Data Flows” tab.

You Could also “Create” sequence from Home Page too.

Click “Create” -> “Sequence”

Assignment Screens: Sequence multiple Data Flows



From the left pane, select the required data flow and drag it to the pane on the right.

Select “DF – Donation by School”, drag and drop

Assignment Screens: Sequence multiple Data Flows

The screenshot shows the Oracle Analytics Cloud interface for sequencing data flows. The top navigation bar includes the Oracle logo, a search icon, and a help icon. The main title is 'Untitled - Sequence'. On the left, a sidebar titled 'Data Flows' lists three items: 'CART Heart Disease Training', 'DF - Donation By School', and 'DF - Split Donations - SubjectAndStates'. The 'DF - Split Donations - SubjectAndStates' item is highlighted with a blue border. The main workspace is titled 'Selections (1)' and contains one entry: 'DF - Donation By School' with the note 'No description available'. A cursor is positioned over the 'DF - Split Donations - SubjectAndStates' item in the sidebar.

Now select the next in sequence,

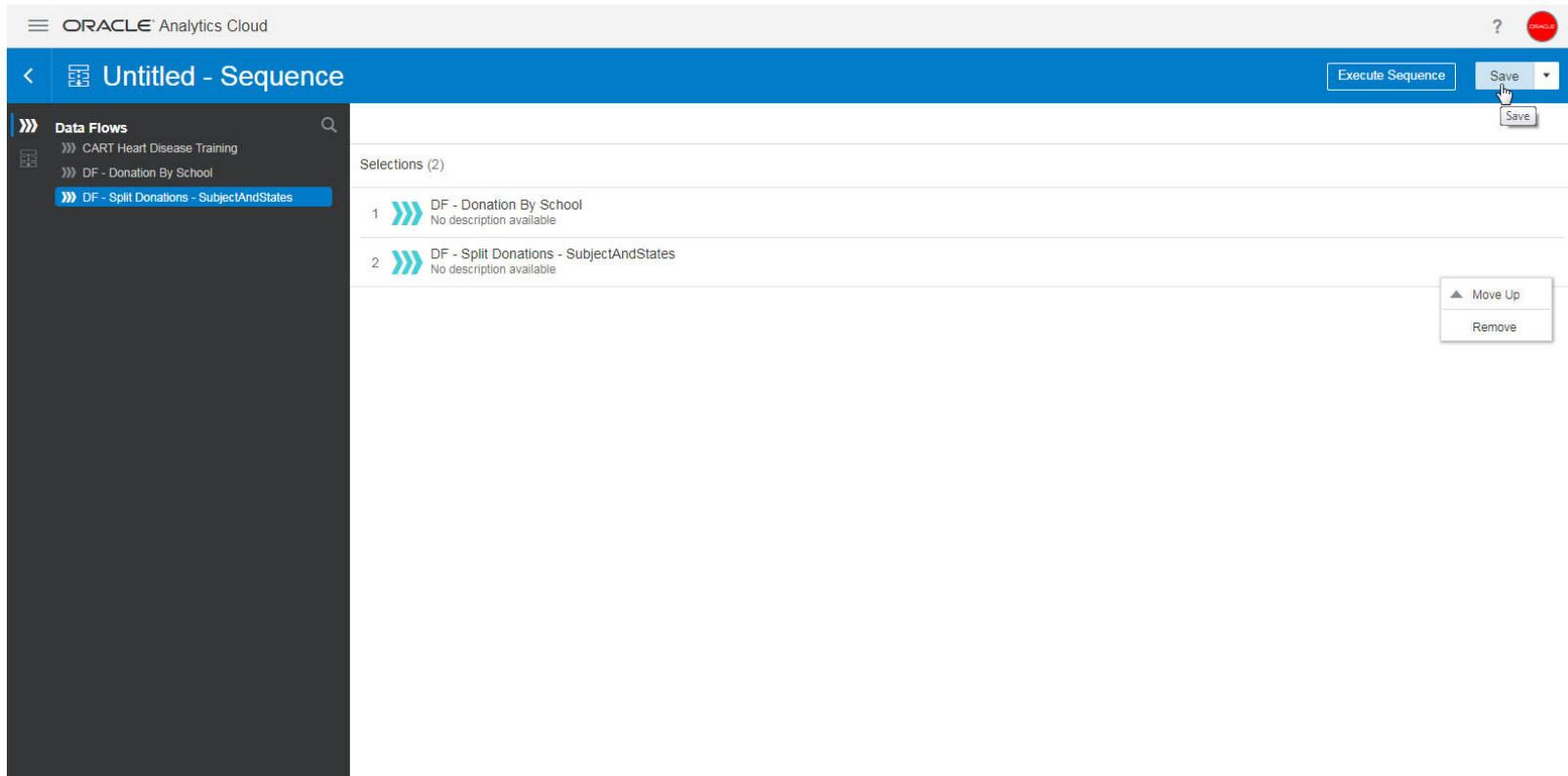
“DT- Split Donations – SubjectAndStates”, drag and drop

Assignment Screens: Sequence multiple Data Flows

The screenshot shows the Oracle Analytics Cloud interface for creating a sequence of data flows. The left sidebar lists available data flows: 'CART Heart Disease Training', 'DF - Donation By School', and 'DF - Split Donations - SubjectAndStates'. The main area displays the selected sequence with two items: 'DF - Donation By School' and 'DF - Split Donations - SubjectAndStates'. A context menu is open over the second item, with options 'Move Up' and 'Remove'.

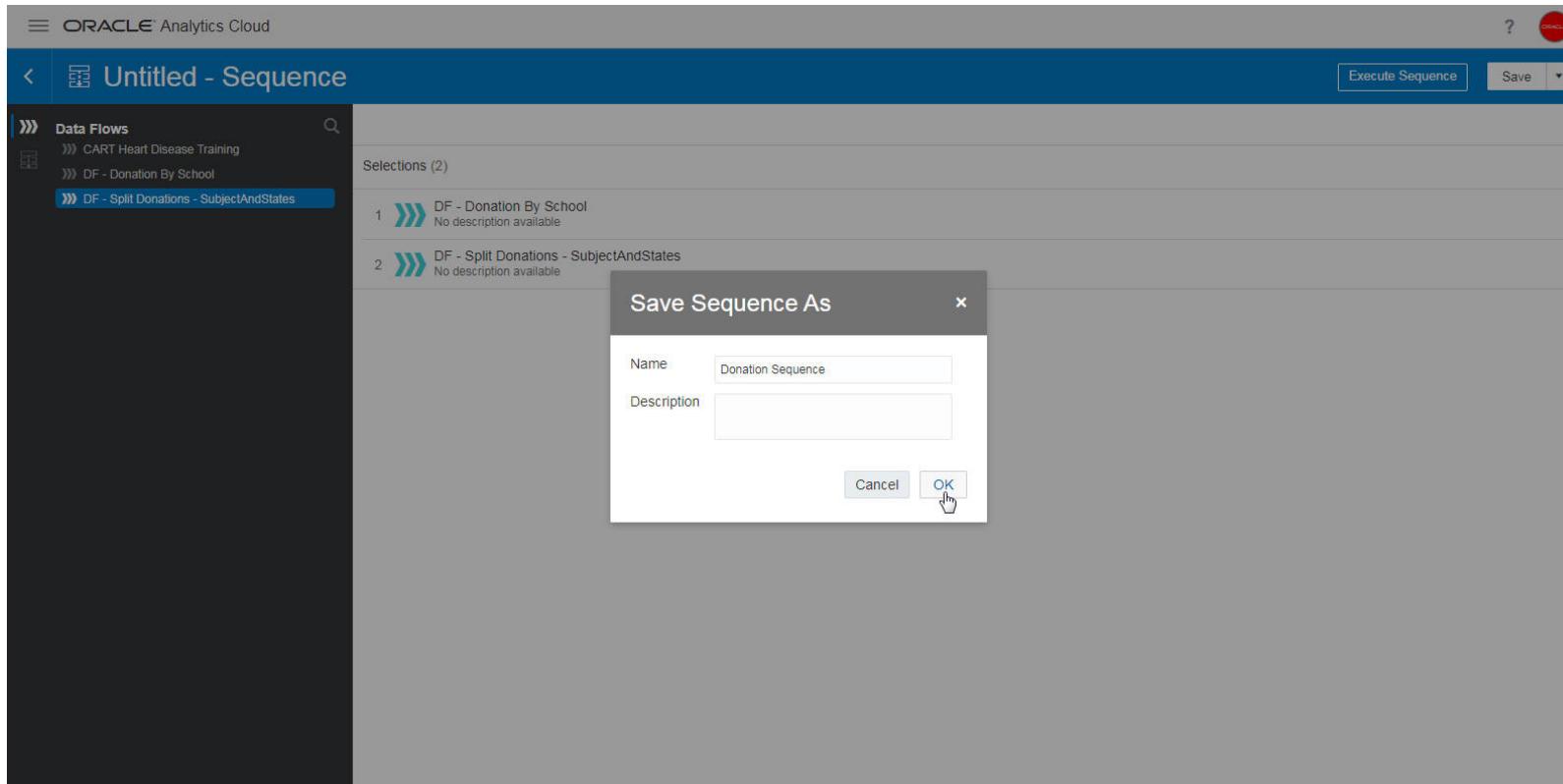
You could re-order the sequence, move Data Flows up or down, as required.

Assignment Screens: Sequence multiple Data Flows



Lets Save our sequence, Click
“Save” Button on the top right

Assignment Screens: Sequence multiple Data Flows



Name the sequence as
“Donation Sequence”

Assignment Screens: Sequence multiple Data Flows

Lets Go Back, “icon” at top-left

The screenshot shows the Oracle Analytics Cloud interface for managing data flows. The title bar reads "Donation Sequence - Sequence". On the left, a sidebar lists "Data Flows" with items like "CART Heart Disease Training", "DF - Donation By School", and "DF - Split Donations - SubjectAndStates". The main area displays "Selections (2)":

- 1 DF - Donation By School (No description available)
- 2 DF - Split Donations - SubjectAndStates (No description available)

At the top right, there are buttons for "Execute Sequence", "Save", and a dropdown menu. A red circle with a white icon is visible in the top right corner of the main window.

Assignment Screens: Sequence multiple Data Flows

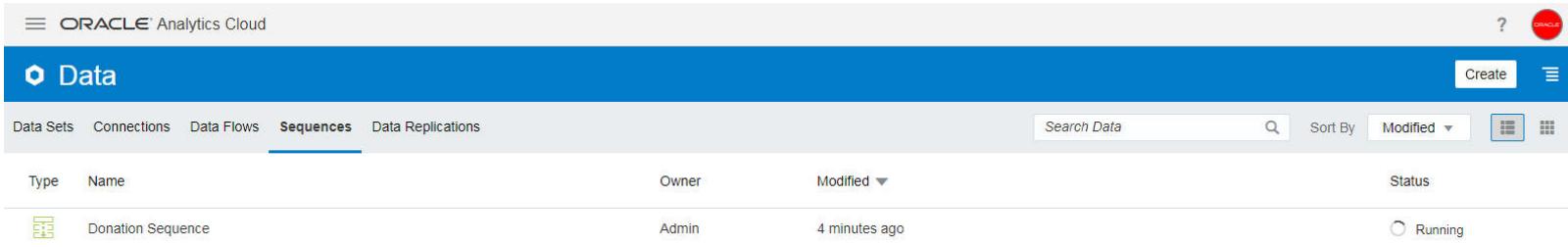
The screenshot shows the Oracle Analytics Cloud interface. The top navigation bar has tabs for Data Sets, Connections, Data Flows, Sequences (which is underlined, indicating it's the active tab), and Data Replications. Below the navigation is a search bar labeled "Search Data" and a "Sort By" dropdown set to "Modified". A "Create" button and a three-dot menu icon are also present. The main content area displays a table with columns: Type, Name, Owner, Modified, and Status. One row is visible for a "Donation Sequence" owned by "Admin" that was modified "Just now". To the right of this row, a context menu is open over the "Actions menu" button, listing options: Run, Open, Open in a New Tab, New schedule, Inspect, and Delete.

| Type | Name | Owner | Modified | Status |
|----------|-------------------|-------|----------|--------|
| Sequence | Donation Sequence | Admin | Just now | |

You see, all available sequences on the “Sequences” tab.

You can manage the “Sequence” from the Actions Menu

Assignment Screens: Sequence multiple Data Flows

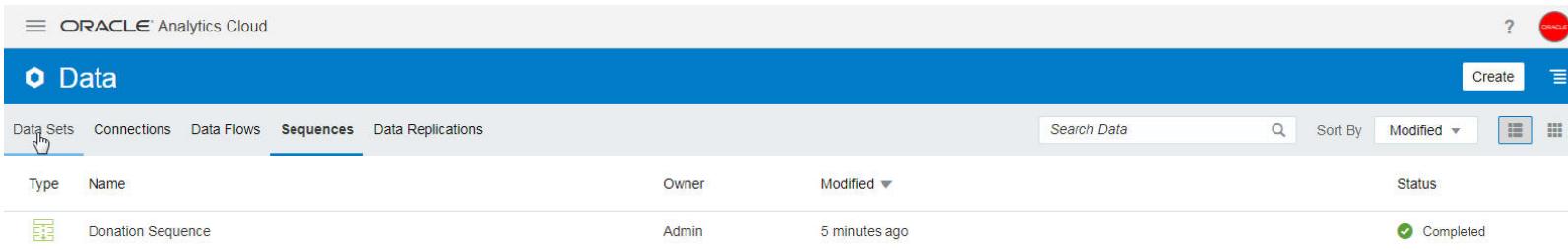


The screenshot shows the Oracle Analytics Cloud interface for managing data sequences. The top navigation bar includes links for Data Sets, Connections, Data Flows, Sequences (which is the active tab), and Data Replications. Below the navigation is a search bar labeled 'Search Data' and a 'Sort By' dropdown set to 'Modified'. A 'Create' button and a three-dot menu icon are also present. The main content area displays a table with columns for Type, Name, Owner, Modified, and Status. A single row is shown for a sequence named 'Donation Sequence', owned by 'Admin', modified '4 minutes ago', and currently 'Running'.

| Type | Name | Owner | Modified | Status |
|----------|-------------------|-------|---------------|---------|
| Sequence | Donation Sequence | Admin | 4 minutes ago | Running |

Lets “Run” or execute the sequence

Assignment Screens: Sequence multiple Data Flows

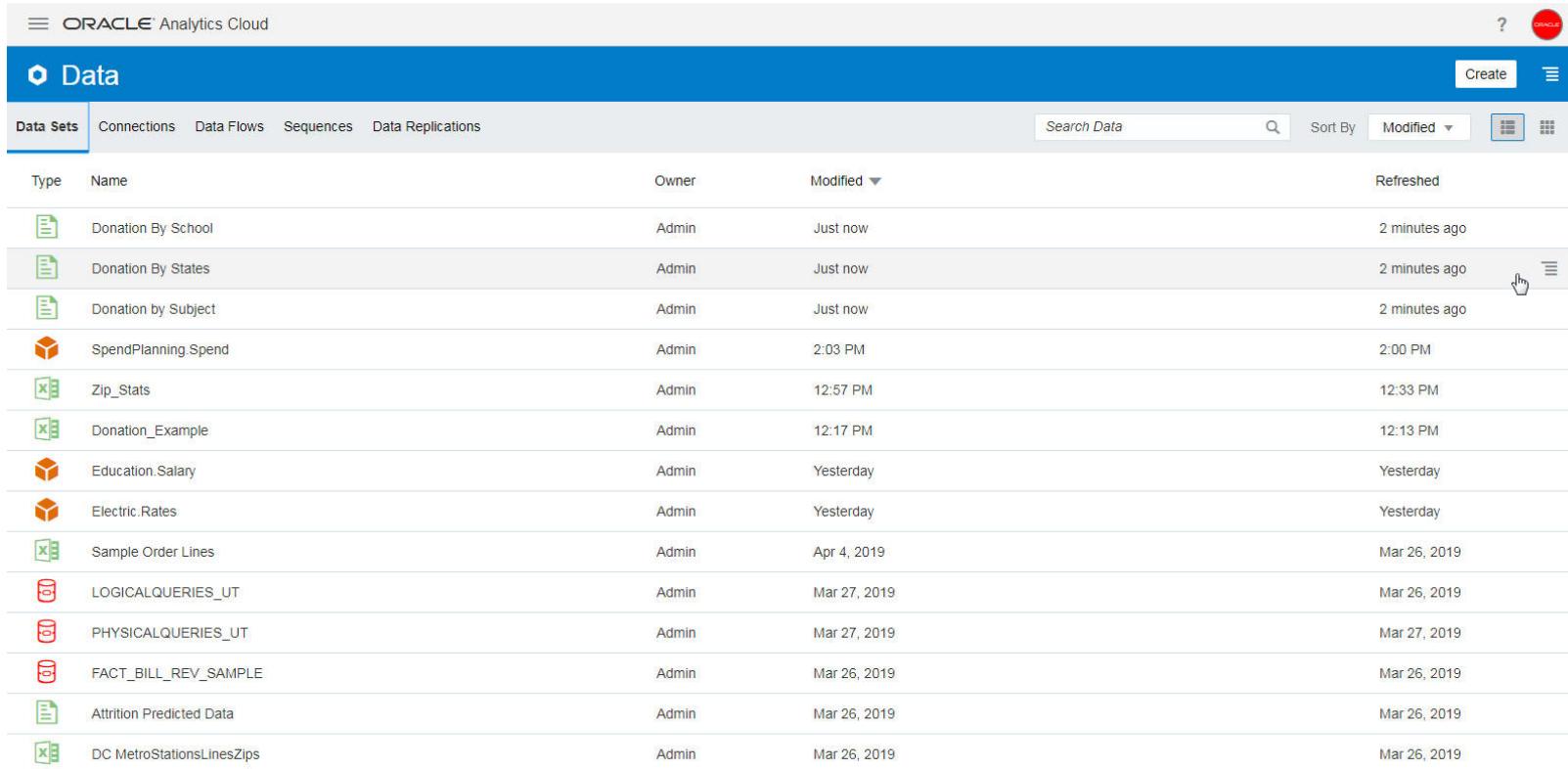


The screenshot shows the Oracle Analytics Cloud interface for managing data sequences. The top navigation bar includes links for Data Sets, Connections, Data Flows, Sequences (which is underlined, indicating it's the active tab), and Data Replications. The main content area displays a table with columns for Type, Name, Owner, Modified, and Status. A single row is visible, representing a sequence named 'Donation Sequence' owned by 'Admin' that was modified '5 minutes ago' and is currently 'Completed'. The status is indicated by a green checkmark icon.

| Type | Name | Owner | Modified | Status |
|----------|-------------------|-------|---------------|-----------|
| Sequence | Donation Sequence | Admin | 5 minutes ago | Completed |

Execution is completed

Assignment Screens: Sequence multiple Data Flows



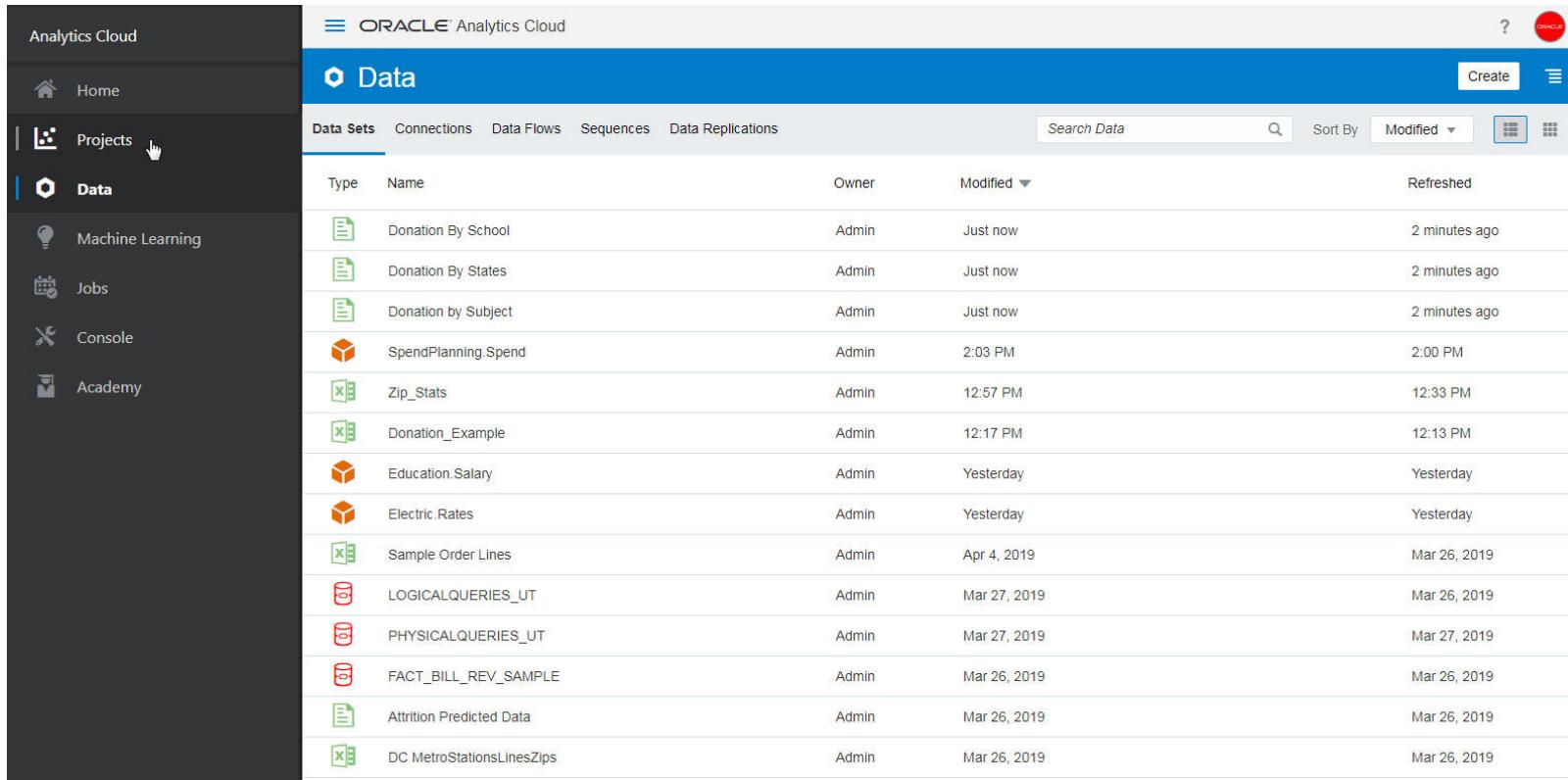
The screenshot shows the Oracle Analytics Cloud interface for managing data sets. The top navigation bar includes links for ORACLE Analytics Cloud, Help, Create, and a search bar. Below the header, there are tabs for Data Sets, Connections, Data Flows, Sequences, and Data Replications. The main content area displays a table of data sets, each with a preview icon, name, owner, modified date, and refresh status. The table is sorted by modified date.

| Type | Name | Owner | Modified | Refreshed |
|------|---------------------------|-------|--------------|---------------|
| File | Donation By School | Admin | Just now | 2 minutes ago |
| File | Donation By States | Admin | Just now | 2 minutes ago |
| File | Donation by Subject | Admin | Just now | 2 minutes ago |
| Cube | SpendPlanning.Spend | Admin | 2:03 PM | 2:00 PM |
| File | Zip_Stats | Admin | 12:57 PM | 12:33 PM |
| File | Donation_Example | Admin | 12:17 PM | 12:13 PM |
| Cube | Education.Salary | Admin | Yesterday | Yesterday |
| Cube | Electric.Rates | Admin | Yesterday | Yesterday |
| File | Sample Order Lines | Admin | Apr 4, 2019 | Mar 26, 2019 |
| File | LOGICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 26, 2019 |
| File | PHYSICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 27, 2019 |
| File | FACT_BILL_REV_SAMPLE | Admin | Mar 26, 2019 | Mar 26, 2019 |
| File | Attrition Predicted Data | Admin | Mar 26, 2019 | Mar 26, 2019 |
| File | DC MetroStationsLinesZips | Admin | Mar 26, 2019 | Mar 26, 2019 |

Post Execution we see, that three data sets are created, the First DF in sequence, created the “Donation by school”, and the second DF created the dataset by states and subjects.

Assignment Screens: Sequence multiple Data Flows

Lets go to the projects



The screenshot shows the Oracle Analytics Cloud interface. The left sidebar has a dark theme with icons for Home, Projects (selected), Data, Machine Learning, Jobs, Console, and Academy. The main area is titled 'Data' and shows a list of 'Data Sets'. The table has columns for Type, Name, Owner, Modified, and Refreshed. The data is as follows:

| Type | Name | Owner | Modified | Refreshed |
|------|---------------------------|-------|--------------|---------------|
| File | Donation By School | Admin | Just now | 2 minutes ago |
| File | Donation By States | Admin | Just now | 2 minutes ago |
| File | Donation by Subject | Admin | Just now | 2 minutes ago |
| Cube | SpendPlanning.Spend | Admin | 2:03 PM | 2:00 PM |
| File | Zip_Stats | Admin | 12:57 PM | 12:33 PM |
| File | Donation_Example | Admin | 12:17 PM | 12:13 PM |
| Cube | Education.Salary | Admin | Yesterday | Yesterday |
| Cube | Electric.Rates | Admin | Yesterday | Yesterday |
| File | Sample Order Lines | Admin | Apr 4, 2019 | Mar 26, 2019 |
| File | LOGICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 26, 2019 |
| File | PHYSICALQUERIES_UT | Admin | Mar 27, 2019 | Mar 27, 2019 |
| File | FACT_BILL_REV_SAMPLE | Admin | Mar 26, 2019 | Mar 26, 2019 |
| File | Attrition Predicted Data | Admin | Mar 26, 2019 | Mar 26, 2019 |
| File | DC MetroStationsLinesZips | Admin | Mar 26, 2019 | Mar 26, 2019 |

Assignment Screens: Sequence multiple Data Flows

The screenshot shows the Oracle Analytics Cloud 'Projects' interface. At the top, there's a navigation bar with 'ORACLE Analytics Cloud', a search bar, and a 'Create' button. Below the bar, a blue header says 'Projects'. Underneath, there are tabs for 'My Folders', 'Shared Folders', 'All Projects', and 'Favorites'. A search bar and sorting options ('Sort By Modified') are also present. The main area displays two projects: 'Donations By School' (updated 5:42 PM on Apr 4, 2019) and 'test' (updated on Mar 26, 2019). The 'Donations By School' project has a context menu open over it, with 'Open' highlighted. The menu includes: Open, Open in a New Tab, Inspect, Rename, Favorite, Export, Move to..., Duplicate, and Delete.

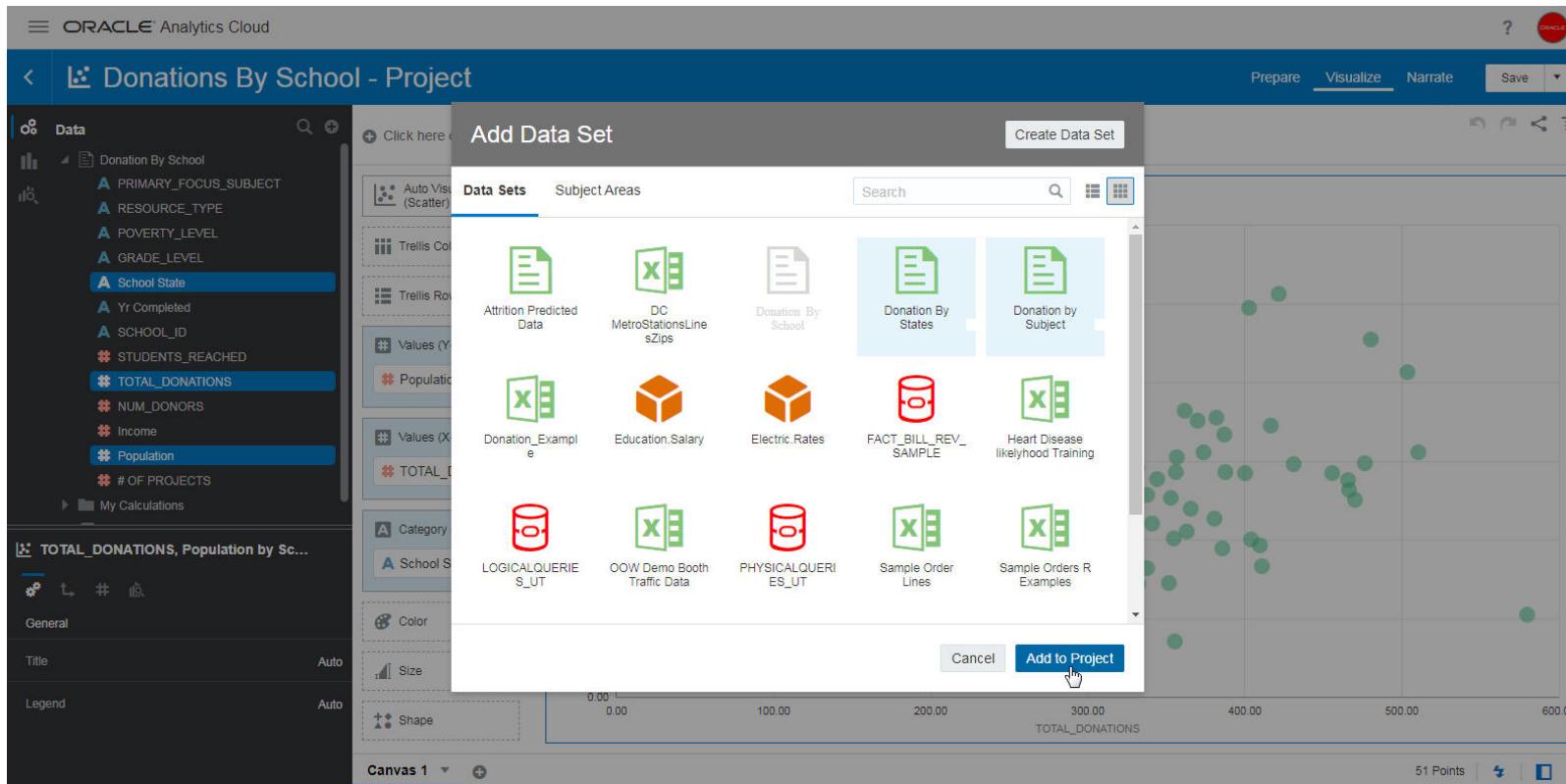
Select the “Donations by School” project and Open it

Assignment Screens: Sequence multiple Data Flows



On the data elements tab, click on the “+” icon and click add data set.

Assignment Screens: Sequence multiple Data Flows



Select the newly created sets,
click add to project.

Assignment Screens: Sequence multiple Data Flows



The two data sets are also available.

This was just to show , how you could continue to use data sets for further visualization if required.

Lets save the project.

In this lecture you learnt to sequence data flows.

Thanks for watching !!

Homecoming of data

Store your curated data in a database



Section 3: Data Flow Deep Dive with Oracle Analytics

Store Data Flow output to a Database

Leverage your curated data for downstream analysis from a Data Lake

- Data Flow outputs can be targeted to be stored in a table in database
- You can save to an Oracle Database, Oracle Autonomous DW & TP, Oracle BDC, Spark, Apache Hive, Hortonworks Hive, Map R Hive database
- Allows incremental data load for database based datasets (both source and target)
- Incremental data load is available only on cloud, not available on DV Desktop

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Home page. At the top, there's a search bar with the placeholder "What are you interested in?". Below it, a "What's New" section displays several project cards:

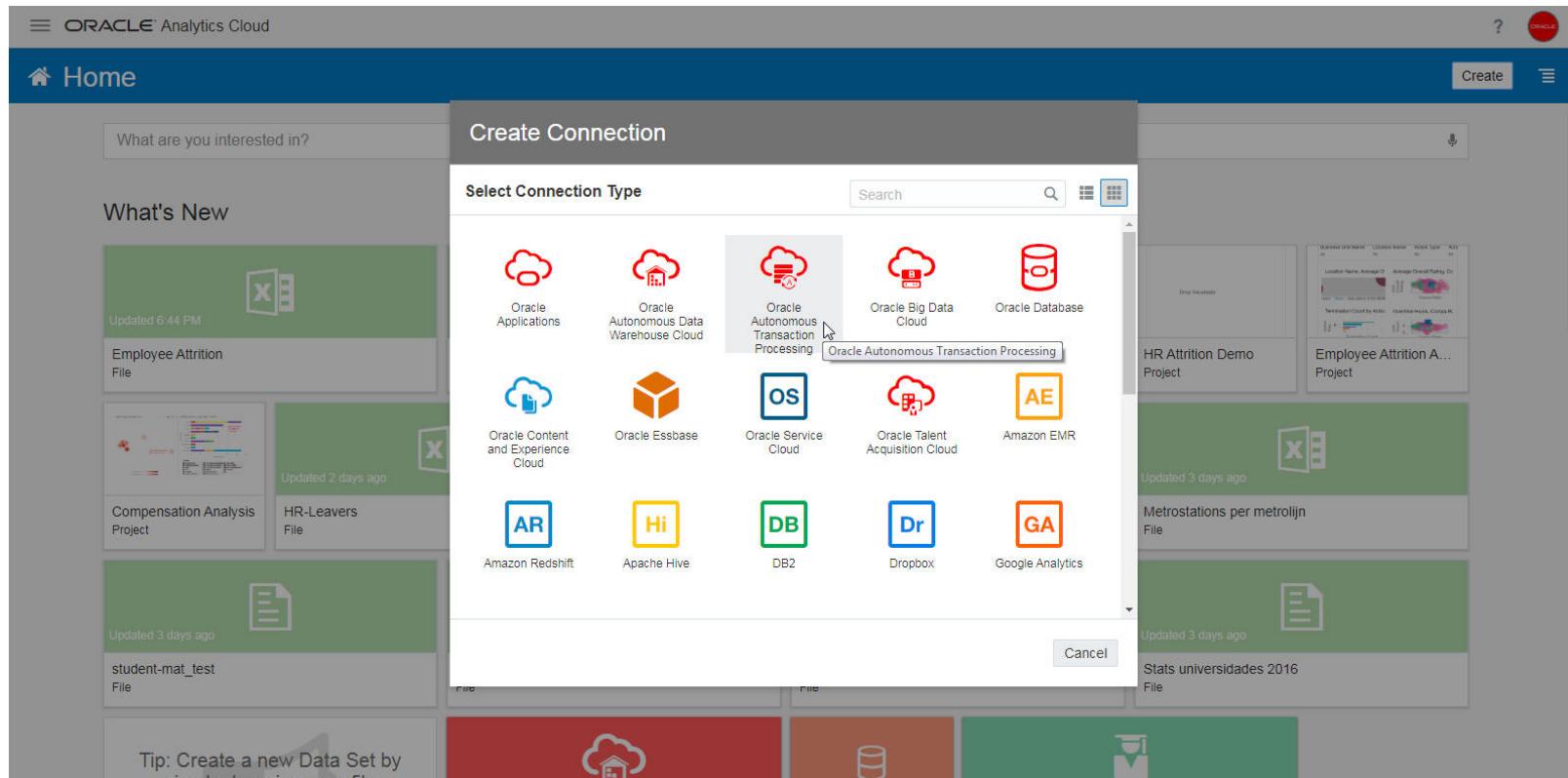
- Employee Attrition File (Updated 6:44 PM)
- NPA analysis File (Updated 6:36 PM)
- Compensation Analysis Project (Updated 2 days ago)
- HR-Leavers File
- student-mat_test File (Updated 3 days ago)
- datos_segmentacion File (Updated 3 days ago)
- Attrition Predict File (Updated 3 days ago)
- UsageTracking_Sam... Project (Updated 3 days ago)
- Cost Management Analytics Project (Updated 3 days ago)
- Metrostations per metrolijn File (Updated 3 days ago)
- Stats universidades 2016 File (Updated 3 days ago)

At the bottom left, a tip says "Tip: Create a new Data Set by clicking on the Data Set icon". On the right side, there's a "Create" button with a dropdown menu open, showing options: Project, Data Set, Data Flow, Sequence, Connection, Data Replication, and Replication Connection.

For this demo, we will need to create two, connections, one for source and one for target.

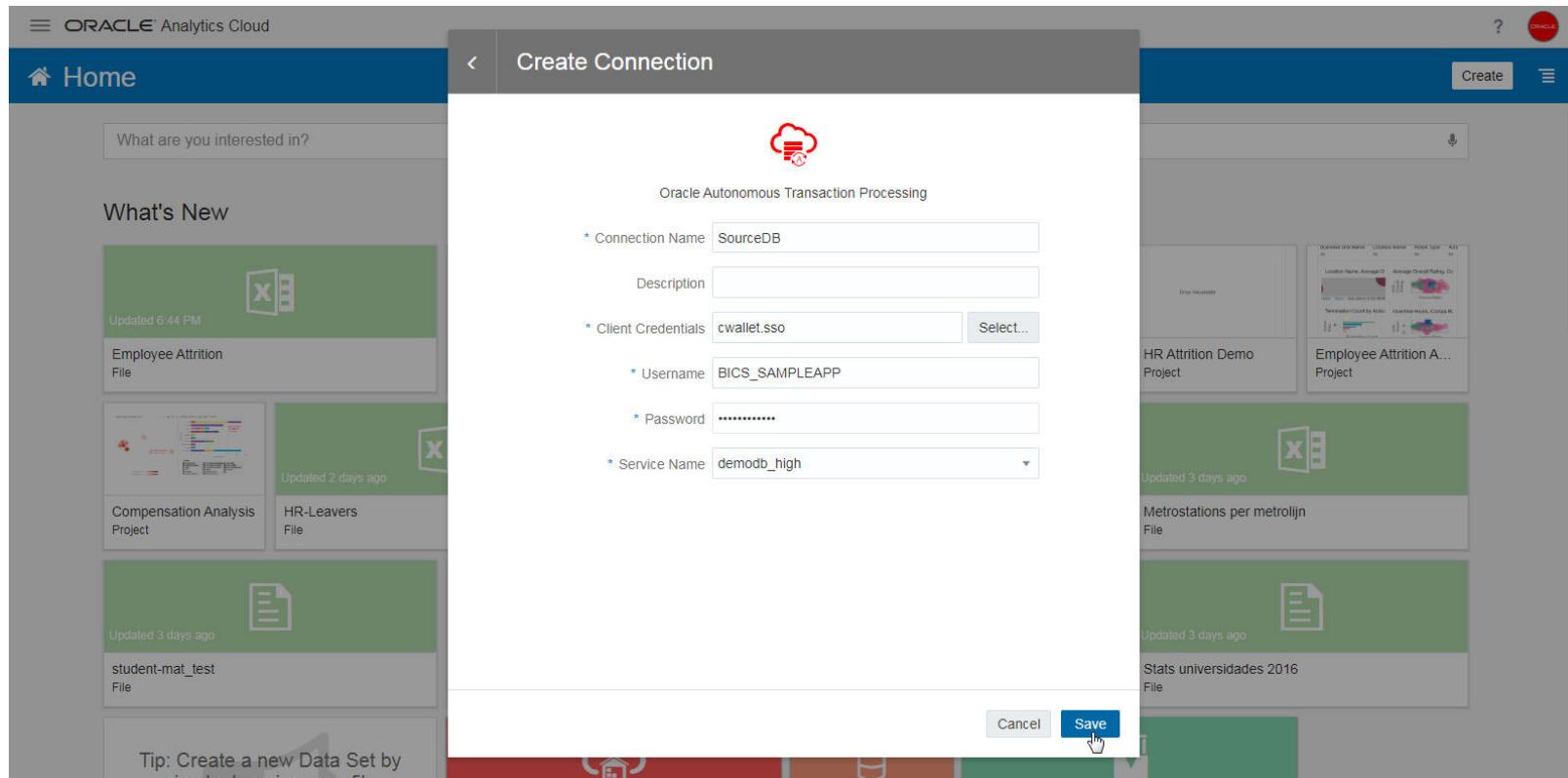
Lets quickly create them. From the Home page, “Create” -> “Connections”

Assignment Screens: Store Data Flow output to a Database



In this case I am selecting a
“Oracle ATP” Connection Type

Assignment Screens: Store Data Flow output to a Database



Enter the mandatory fields, click save

Assignment Screens: Store Data Flow output to a Database

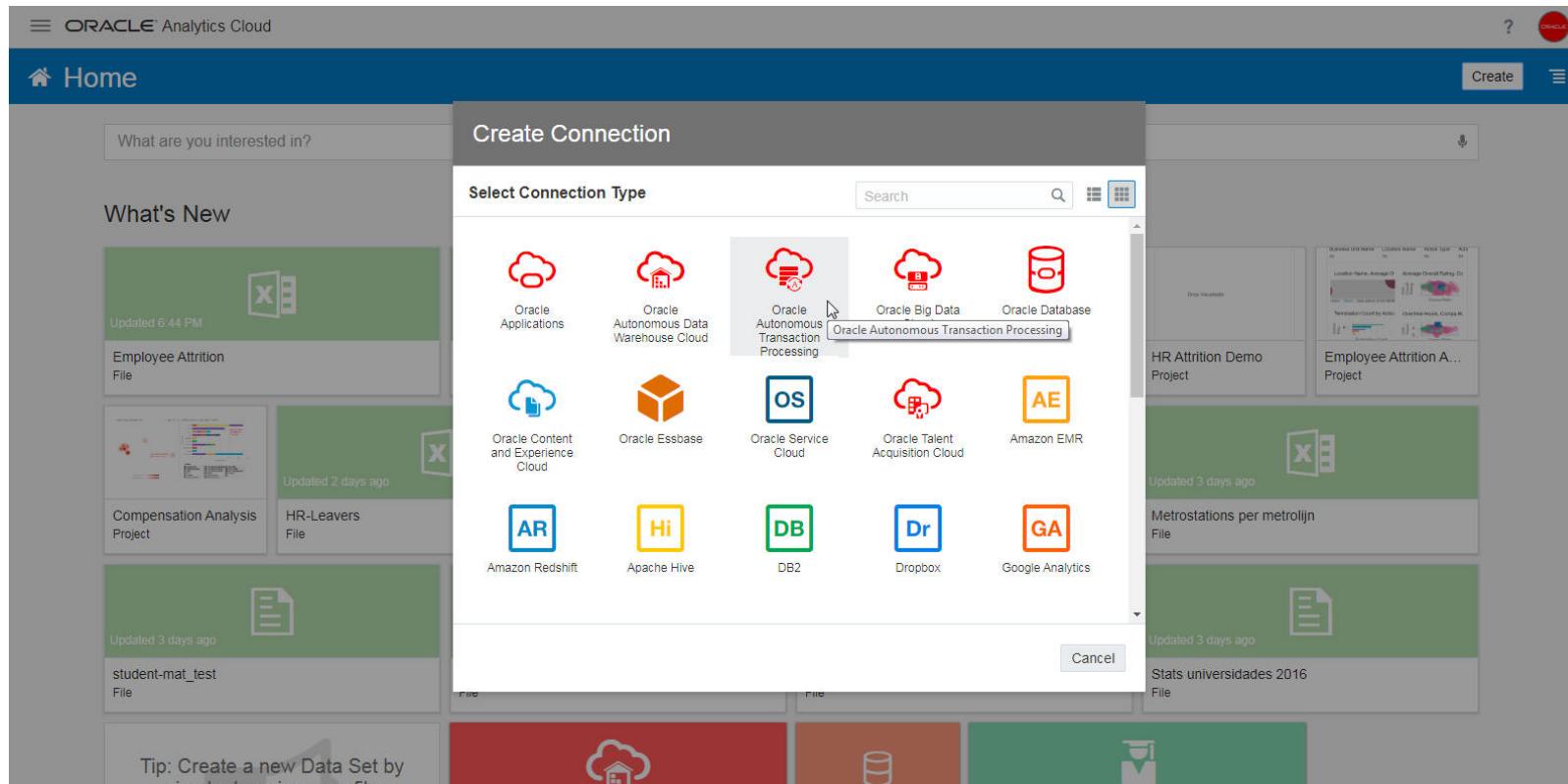
The screenshot shows the Oracle Analytics Cloud Home screen. At the top, there's a search bar with the placeholder "What are you interested in?". Below it, a "What's New" section displays several project cards:

- Employee Attrition File (Updated 6:44 PM)
- NPA analysis File (Updated 6:36 PM)
- Compensation Analysis Project (Updated 2 days ago)
- HR-Leavers File
- student-mat_test File (Updated 3 days ago)
- datos_segmentacion File (Updated 3 days ago)
- Attrition Predict File (Updated 3 days ago)
- UsageTracking_Sam... Project (Updated 3 days ago)
- Cost Management Analytics Project (Updated 3 days ago)
- Metrostations per metrolijn File (Updated 3 days ago)
- Stats universidades 2016 File (Updated 3 days ago)

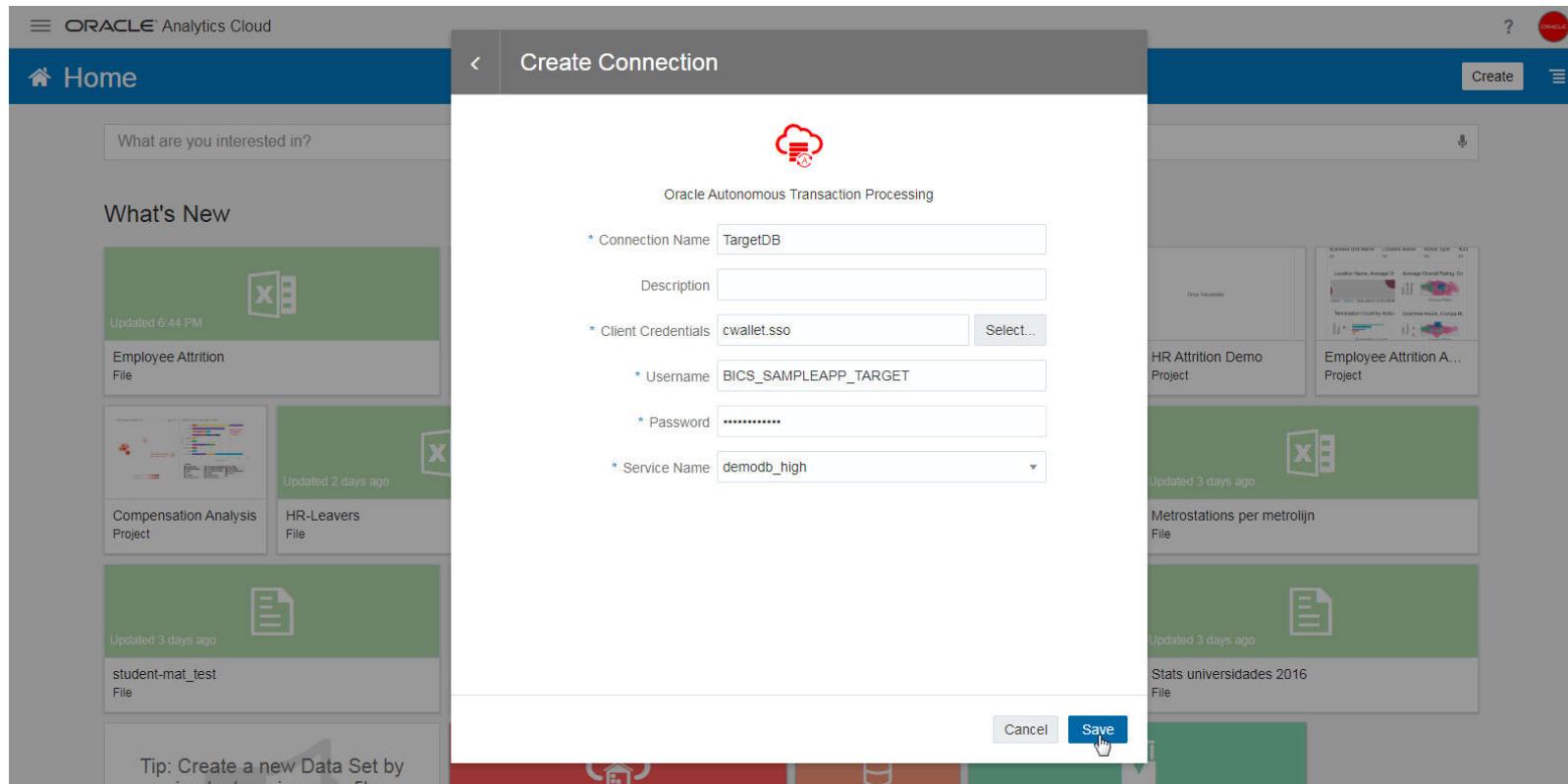
A "Create" dialog is open on the right side, listing options: Project (selected), Data Set, Data Flow, Sequence, Connection, Data Replication, and Replication Connection. A cursor is hovering over the "Connection" button.

Lets follow the same steps to create a target connection

Assignment Screens: Store Data Flow output to a Database



Assignment Screens: Store Data Flow output to a Database



Assignment Screens: Store Data Flow output to a Database

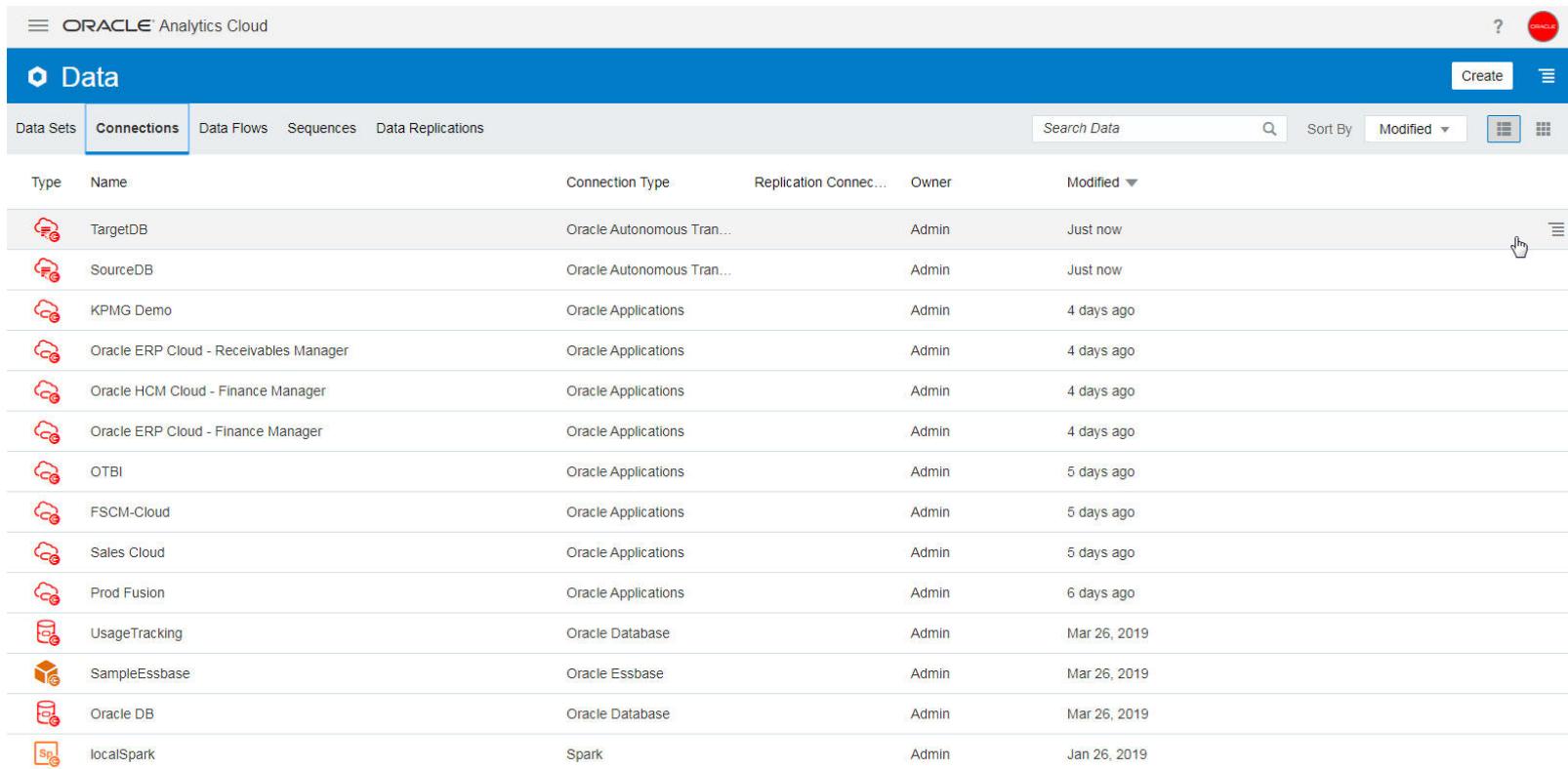
Lets Go to the Data tab

The screenshot shows the Oracle Analytics Cloud interface. The left sidebar has a dark theme with icons for Home, Projects, Data (selected), Machine Learning, Jobs, Console, and Academy. The main area is titled 'Home' with a search bar 'What are you interested in?'. A section 'What's New' displays various data sets and projects:

- Employee Attrition File (Updated 6:44 PM)
- NPA analysis File (Updated 6:36 PM)
- Employee Attrition A... Project (Updated 2 days ago)
- Compensation Analysis Project
- HR-Leavers File (Updated 2 days ago)
- Cost Management Analytics Project
- Metrostations per metrolijn File (Updated 3 days ago)
- student-mat_test File (Updated 3 days ago)
- datos_segmentacion File (Updated 3 days ago)

A red callout box on the right says 'Connect to Your Data' with a database icon. At the bottom, a tip says 'Tip: Create a new Data Set by ...'.

Assignment Screens: Store Data Flow output to a Database



The screenshot shows the Oracle Analytics Cloud interface for managing data connections. The top navigation bar includes 'ORACLE Analytics Cloud' and a 'Data' icon. Below it, a blue header bar has tabs for 'Data Sets', 'Connections' (which is selected), 'Data Flows', 'Sequences', and 'Data Replications'. The main area is a table with columns: Type, Name, Connection Type, Replication Connec..., Owner, and Modified. The table lists 14 connections, including 'TargetDB', 'SourceDB', and several Oracle Applications and Database connections. A 'Create' button and a search bar are at the top of the table area.

| Type | Name | Connection Type | Replication Connec... | Owner | Modified | Actions |
|-------|--|---------------------------|-----------------------|-------|--------------|---------|
| Cloud | TargetDB | Oracle Autonomous Tran... | | Admin | Just now | |
| Cloud | SourceDB | Oracle Autonomous Tran... | | Admin | Just now | |
| Cloud | KPMG Demo | Oracle Applications | | Admin | 4 days ago | |
| Cloud | Oracle ERP Cloud - Receivables Manager | Oracle Applications | | Admin | 4 days ago | |
| Cloud | Oracle HCM Cloud - Finance Manager | Oracle Applications | | Admin | 4 days ago | |
| Cloud | Oracle ERP Cloud - Finance Manager | Oracle Applications | | Admin | 4 days ago | |
| Cloud | OTBI | Oracle Applications | | Admin | 5 days ago | |
| Cloud | FSCM-Cloud | Oracle Applications | | Admin | 5 days ago | |
| Cloud | Sales Cloud | Oracle Applications | | Admin | 5 days ago | |
| Cloud | Prod Fusion | Oracle Applications | | Admin | 6 days ago | |
| Cloud | UsageTracking | Oracle Database | | Admin | Mar 26, 2019 | |
| Cloud | SampleEssbase | Oracle Essbase | | Admin | Mar 26, 2019 | |
| Cloud | Oracle DB | Oracle Database | | Admin | Mar 26, 2019 | |
| Spark | localSpark | Spark | | Admin | Jan 26, 2019 | |

On the Connections we see our
newly created connections

Assignment Screens: Store Data Flow output to a Database

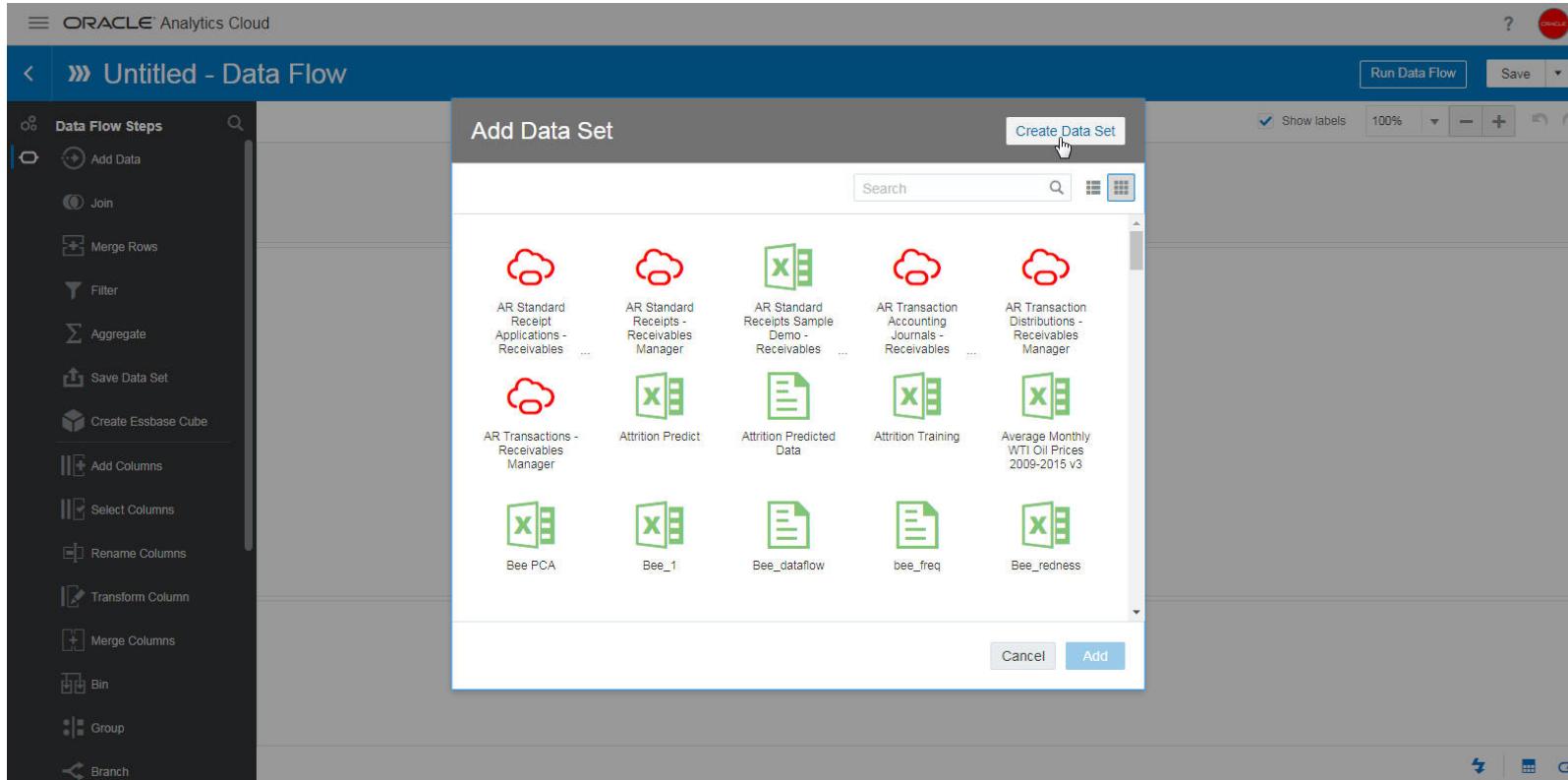
The screenshot shows the Oracle Analytics Cloud interface. The top navigation bar includes the Oracle logo and a 'Data' icon. Below the navigation is a menu bar with 'Data Sets', 'Connections' (which is selected), 'Data Flows', 'Sequences', and 'Data Replications'. A search bar labeled 'Search Data' is positioned above a table. The table lists various connections with columns for Type, Name, Connection Type, Replication Connec..., Owner, and Modified. The 'Modified' column is sorted in descending order. A 'Create' button in the top right of the table triggers a modal window titled 'Create'. The modal contains six items: 'Project' (selected), 'Data Set', 'Data Flow' (with a cursor over it), 'Sequence', 'Connection', 'Data Replication', and 'Replication Connection'. The 'Data Flow' item is highlighted with a blue border.

| Type | Name | Connection Type | Replication Connec... | Owner | Modified |
|-------|--|---------------------------|-----------------------|-------|--------------|
| Cloud | TargetDB | Oracle Autonomous Tran... | | Admin | Just now |
| Cloud | SourceDB | Oracle Autonomous Tran... | | Admin | Just now |
| Cloud | KPMG Demo | Oracle Applications | | Admin | 4 days ago |
| Cloud | Oracle ERP Cloud - Receivables Manager | Oracle Applications | | Admin | 4 days ago |
| Cloud | Oracle HCM Cloud - Finance Manager | Oracle Applications | | Admin | 4 days ago |
| Cloud | Oracle ERP Cloud - Finance Manager | Oracle Applications | | Admin | 4 days ago |
| Cloud | OTBI | Oracle Applications | | Admin | 5 days ago |
| Cloud | FSCM-Cloud | Oracle Applications | | Admin | 5 days ago |
| Cloud | Sales Cloud | Oracle Applications | | Admin | 5 days ago |
| Cloud | Prod Fusion | Oracle Applications | | Admin | 6 days ago |
| Cloud | UsageTracking | Oracle Database | | Admin | Mar 26, 2019 |
| Cloud | SampleEssbase | Oracle Essbase | | Admin | Mar 26, 2019 |
| Cloud | Oracle DB | Oracle Database | | Admin | Mar 26, 2019 |
| Spark | localSpark | Spark | | Admin | Jan 26, 2019 |

Lets leverage these to create a data Flow

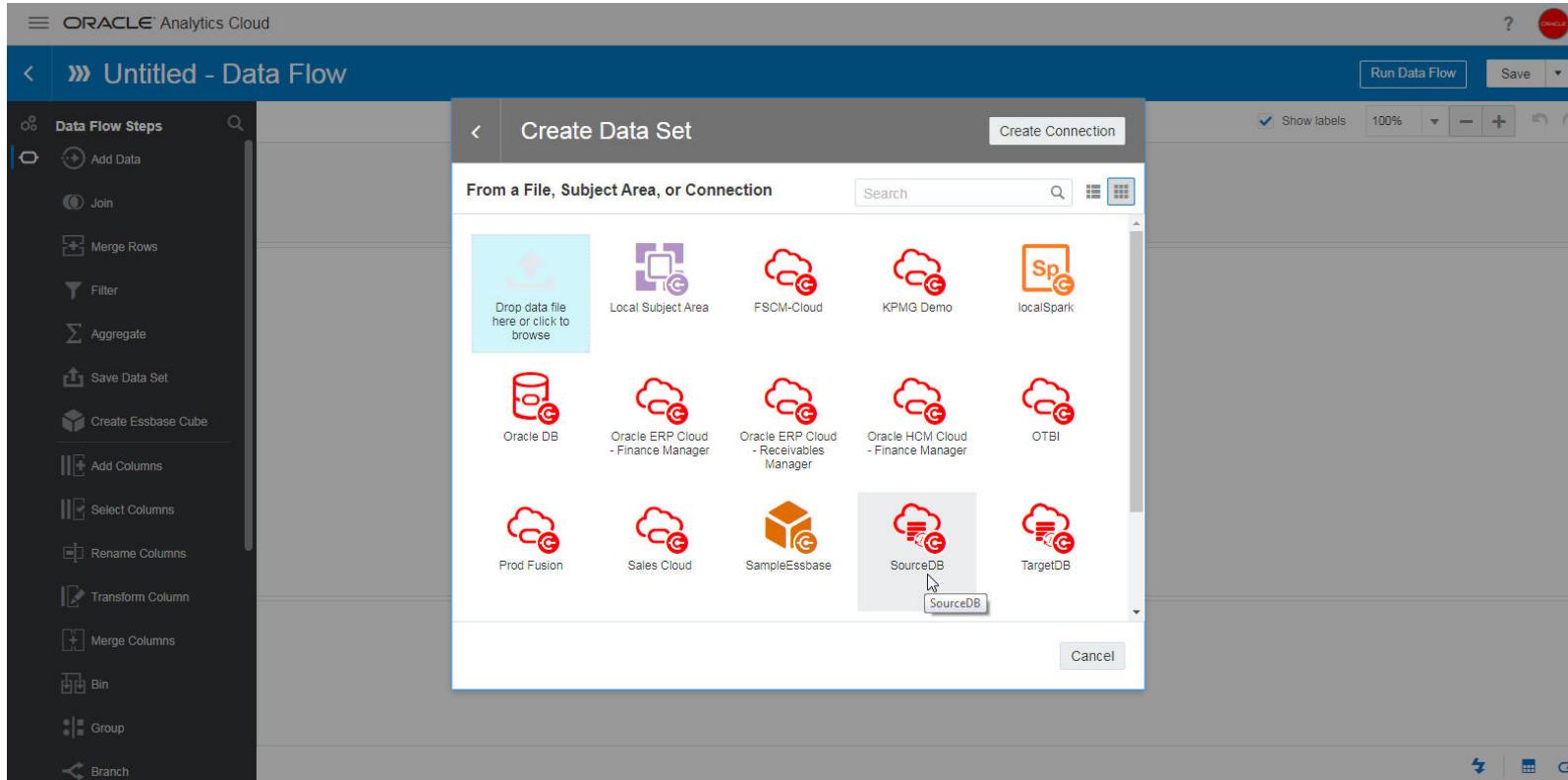
Assignment Screens: Store Data Flow output to a Database

DF starts with DS



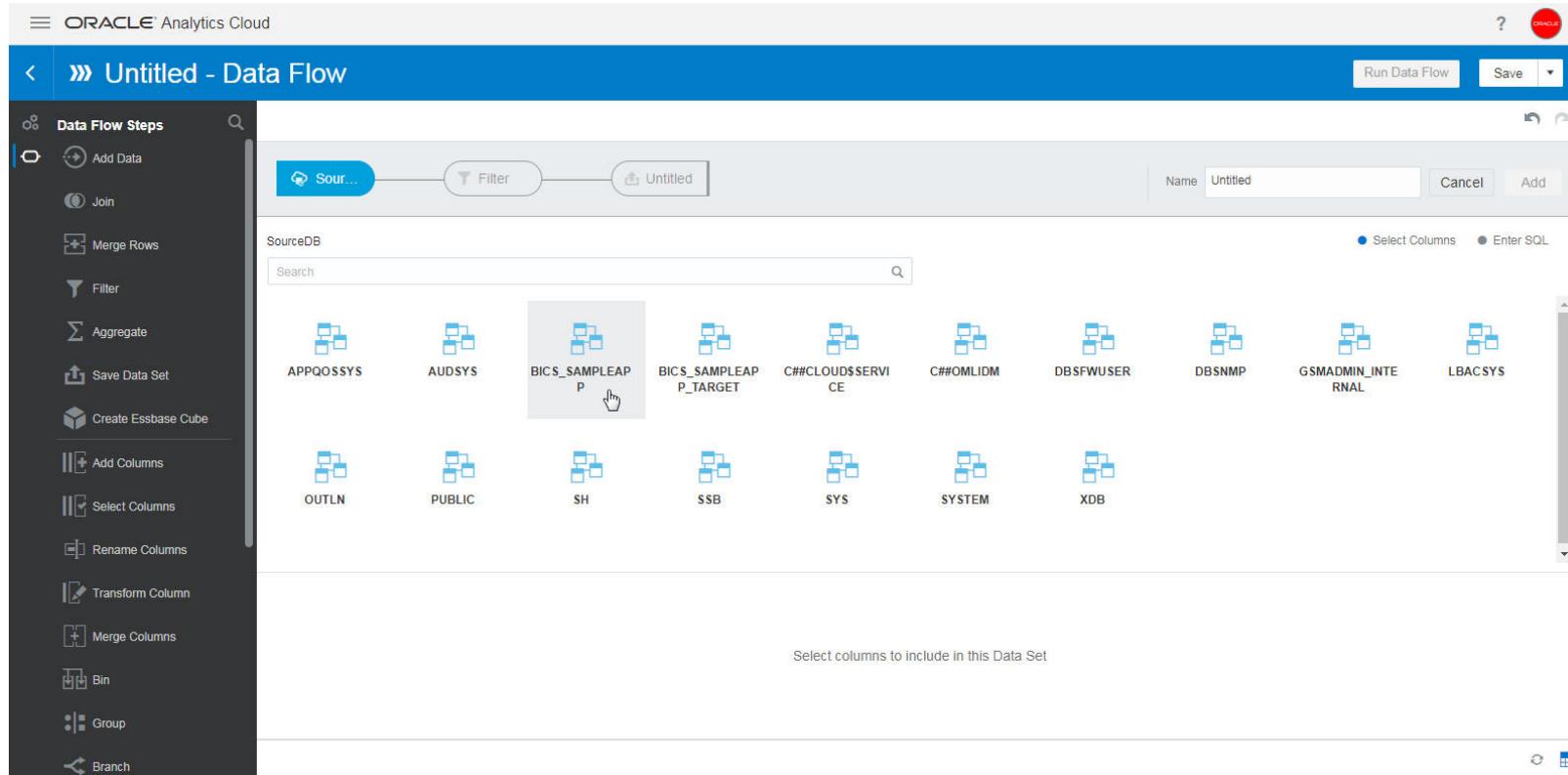
Assignment Screens: Store Data Flow output to a Database

Select Source DB



Assignment Screens: Store Data Flow output to a Database

Select the schema



Assignment Screens: Store Data Flow output to a Database

Select Table

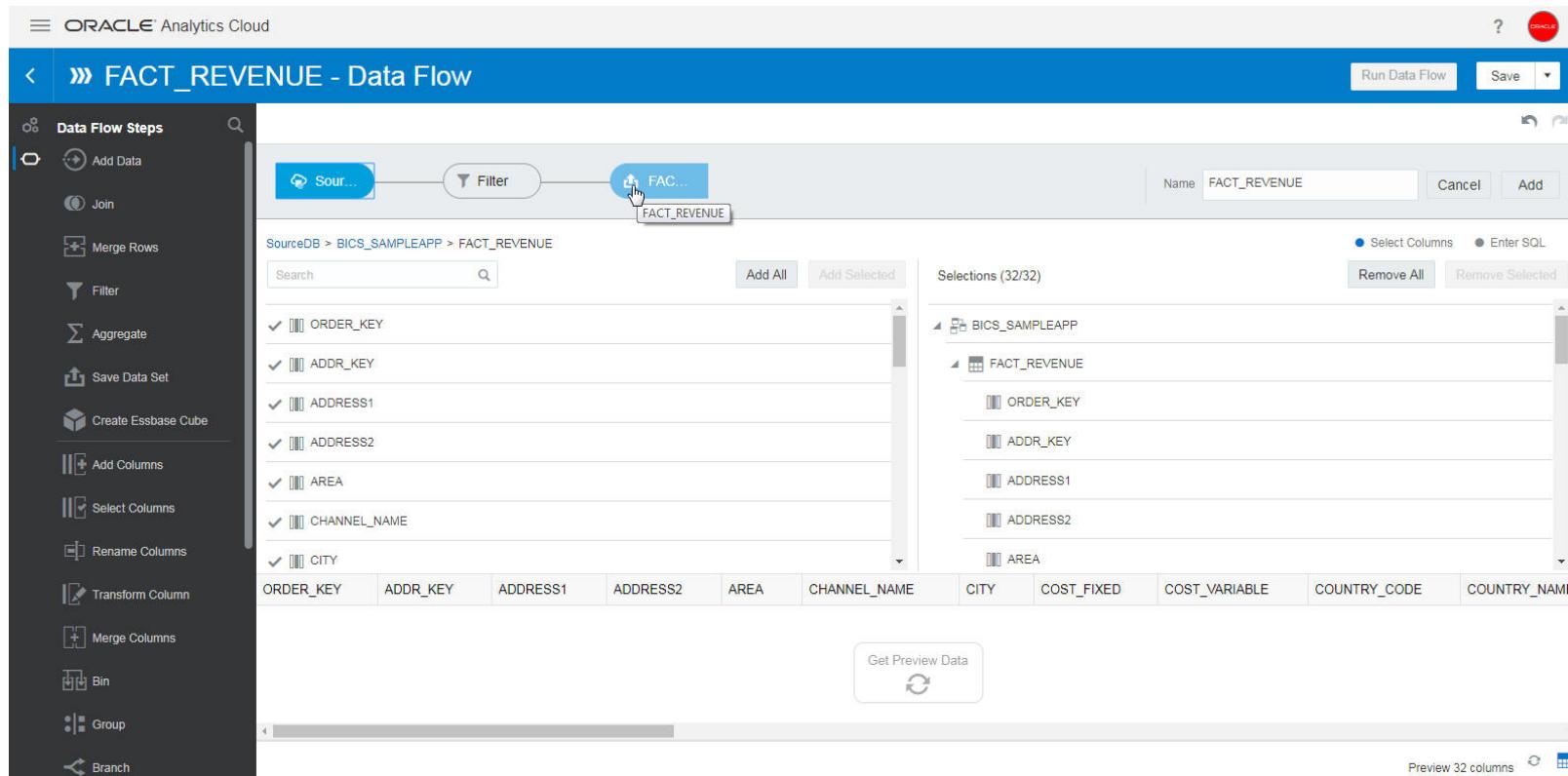
The screenshot shows the Oracle Analytics Cloud Data Flow interface. The title bar reads "FACT_REVENUE - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a data flow diagram with three nodes: "Sour...", "Filter", and "Untitled". Below the diagram, a list of tables from "SourceDB > BICS_SAMPLEAPP" is shown, including BICS_REVENUE_FT2, BINSnRptorkzzgUxkYAAq0lw==\$, BINSnRptorizzgUxkYAAq0lw==\$, FACT_REVENUE, FACT_REVENUE_BICS_SAMPLEAPP.FACT_REVENUE, MD_ADDITIONAL_PROPERTIES, and MD_APPLICATIONFILES. The "FACT_REVENUE" table is selected, highlighted with a blue border. A tooltip "Select columns to include in this Data Set" is visible at the bottom of the list. The top right of the screen has buttons for "Run Data Flow", "Save", and "Add". The bottom right has buttons for "Select Columns" and "Enter SQL", along with "Remove All" and "Remove Selected".

Assignment Screens: Store Data Flow output to a Database

Add All Col

The screenshot shows the Oracle Analytics Cloud Data Flow interface for a process named 'FACT_REVENUE - Data Flow'. The interface includes a toolbar with 'Run Data Flow' and 'Save' buttons, and a sidebar with various data flow steps like 'Add Data', 'Join', 'Merge Rows', 'Filter', 'Aggregate', 'Save Data Set', 'Create Essbase Cube', 'Add Columns', 'Select Columns', 'Rename Columns', 'Transform Column', 'Merge Columns', 'Bin', 'Group', and 'Branch'. The main workspace displays a data flow diagram with three nodes: 'Sour...', 'Filter', and 'FAC...'. Below the diagram, the 'SourceDB > BICS_SAMPLEAPP > FACT_REVENUE' section lists columns: ORDER_KEY, ADDR_KEY, ADDRESS1, ADDRESS2, AREA, CHANNEL_NAME, and CITY. An 'Add All' button is highlighted with a cursor. To the right, the 'Selections (32/32)' section shows the selected columns: ORDER_KEY, ADDR_KEY, ADDRESS1, ADDRESS2, AREA, CHANNEL_NAME, and CITY, all under the 'FACT_REVENUE' table. A 'Get Preview Data' button is at the bottom.

Assignment Screens: Store Data Flow output to a Database



Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The main title bar says "FACT_REVENUE - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The central workspace displays a data flow step named "FACT...". Below it, the step details are shown: Name: FACT_REVENUE, Description: External Data Set, Connection: SourceDB, Data Access: Automatic Caching, and New Data Indicator: TIME_BILL_DT_DATE. A preview of the data columns is visible at the bottom.

Click on the DS,

“New Data Indicator” Field must be tagged on the source ds, to help identify incremental.

Click “Add”, to Add Source DS

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The main title bar reads "FACT_REV... - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The "Add Data" step is currently selected, indicated by a blue background. The main workspace displays the "Add Data - FACT_REV..." configuration. It shows a table with columns: ORDER_KEY, ADDR_KEY, ADDRESS1, ADDRESS2, AREA, CHANNEL_NAME, CITY, COST_FIXED, and COST_VARIABLE. Two rows of data are visible: one for ORDER_KEY 92,964 and another for 50,798. Above the table, under "Columns", there are two tabs: "All (32)" and "Selections (32)". The "All (32)" tab is selected. Below the tabs, a checkbox labeled "Add new data only" is checked. Other settings include "Description: External Data Set", "When Run: Prompt to select Data Set", and a "Run Data Flow" button at the top right.

You need to also check “Add new data only”, if you want to set up incremental load to the target.

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data Flow interface for a project named 'FACT_REV.X'. The main area displays a data flow step titled 'FACT.REV.X' with various icons for operations like Add Data, Join, Merge Rows, Filter, Aggregate, Save Data, and Create Essbase Cube. A tooltip for the 'Save Data' icon is visible. Below the step, there's a table with columns: 99 ORDER_KEY, 99 ADDR_KEY, 99 ADDRESS1, ab ADDRESS2, ab AREA, ab CHANNEL_NAME, ab CITY, 99 COST_FIXED, and 99 COST_VARIABLE. The table contains two rows of data. On the left sidebar, there's a list of data flow steps including Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch.

I just want to save this, Select
“Save Data”

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data Flow interface. On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main area is titled 'FACT_REV...' and has a 'Save Data' button. Below this is a 'Save Data Set' dialog. In the 'Name' field, 'TargetRevenue' is entered. The 'Columns' section maps columns from the source to the target database: ORDER_KEY to ORDER_KEY (Measure, Sum), ADDR_KEY to ADDR_KEY (Measure, Sum), ADDRESS1 to ADDRESS1 (Measure, Sum), ADDRESS2 to ADDRESS2 (Attribute), AREA to AREA (Attribute), and CHANNEL_NAME to CHANNEL_NAME (Attribute). The 'Connection' is set to 'TargetDB' and the 'Table' is 'TARGET_REVENUE'. The 'When run' dropdown is set to 'Add new data to existing data'. At the bottom, there is a preview of the data with two rows:

| 99 ORDER_KEY | 99 ADDR_KEY | 99 ADDRESS1 | ab ADDRESS2 | ab AREA | ab CHANNEL_NAME | ab CITY | 99 COST_FIXED | 99 COST_VARIABLE |
|--------------|-------------|-------------|----------------|---------------|-----------------|-----------|---------------|------------------|
| 3,220,275 | 8,117 | 57 | N Weinbach Ave | North America | Online | Montreal | 51.83 | 333,9300 |
| 2,700,578 | 15,111 | 50 808 | A Pamalee Dr | West | Store | Pune City | 3,870.68 | 554,6000 |

Give the DataSet a Name,

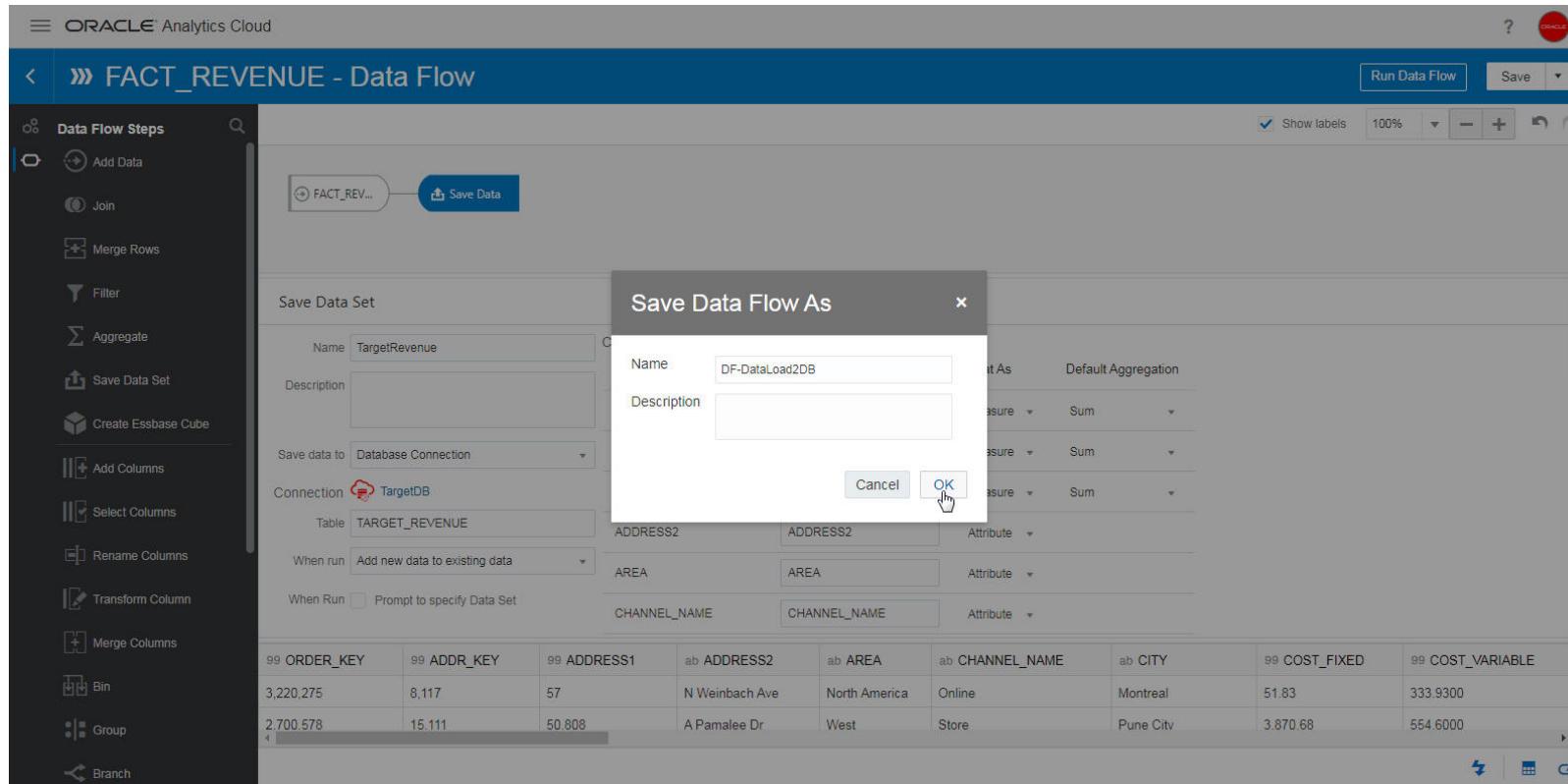
Save data to “Target DB”

Table Name:

When Run Field “Add new data to existing Data”

Save the Data Flow

Assignment Screens: Store Data Flow output to a Database



Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The main title bar reads "DF-DataLoad2DB - Data Flow". On the left, a sidebar lists various data flow steps: Go back, Data Flow Steps (selected), Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace shows a flow step labeled "FACT_REV..." connected to a "Save Data" button. Below this, a "Save Data Set" dialog is open. The "Name" field is set to "TargetRevenue". The "Columns" section lists columns from the source table: ORDER_KEY, ADDR_KEY, ADDRESS1, ADDRESS2, AREA, and CHANNEL_NAME. These columns are mapped to target database columns: ORDER_KEY, ADDR_KEY, ADDRESS1, ADDRESS2, AREA, and CHANNEL_NAME. The "Treat As" dropdown indicates that all columns are treated as measures, except for ADDRESS1 which is treated as an attribute. The "Default Aggregation" dropdown shows "Sum" for all columns except ADDRESS1. The "Connection" is set to "TargetDB" and the "Table" is "TARGET_REVENUE". The "When run" dropdown is set to "Add new data to existing data". At the bottom of the dialog, there is a preview table showing sample data for the columns: ORDER_KEY, ADDR_KEY, ADDRESS1, ADDRESS2, AREA, and CHANNEL_NAME.

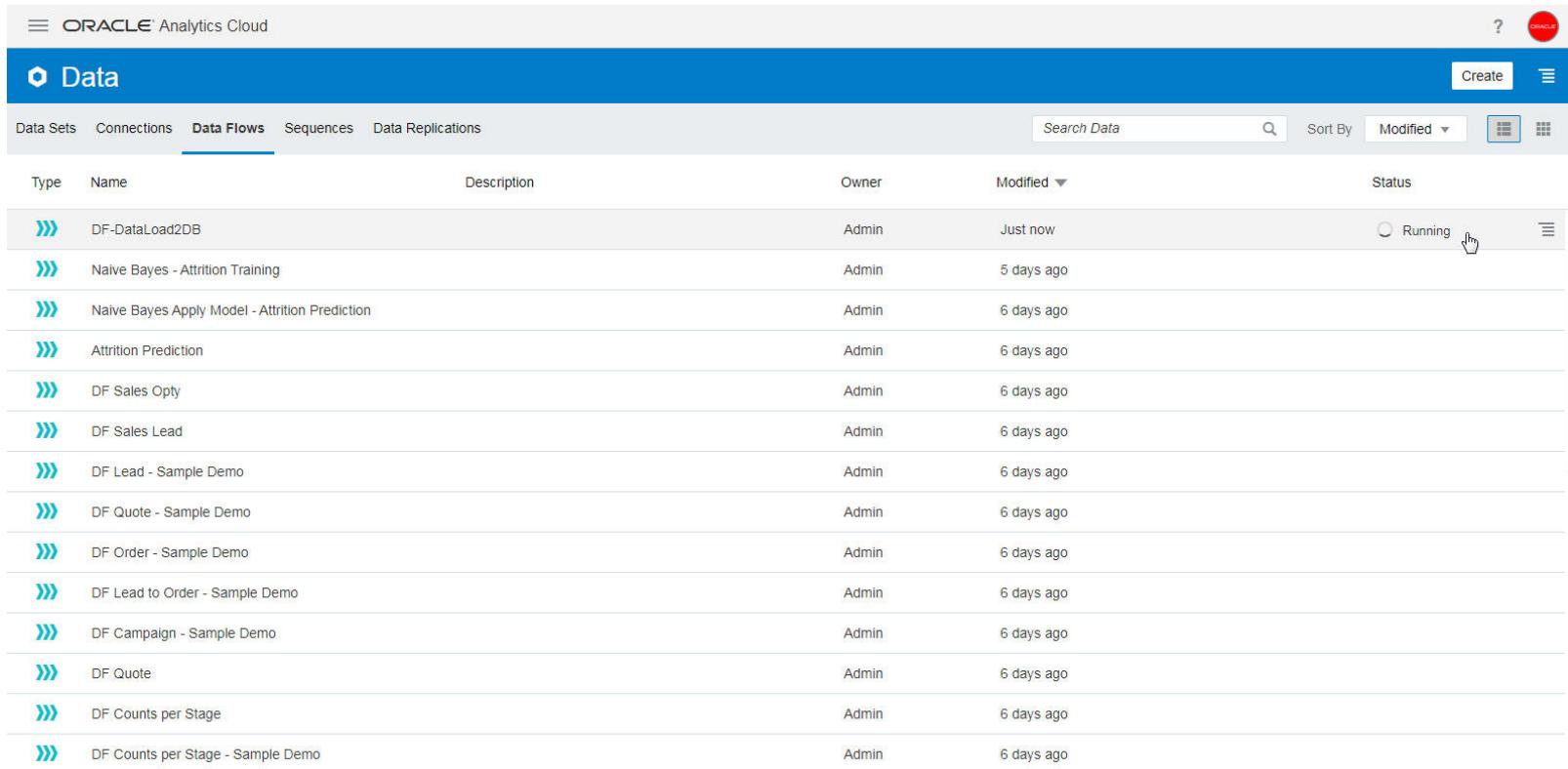
| 99 ORDER_KEY | 99 ADDR_KEY | 99 ADDRESS1 | ab ADDRESS2 | ab AREA | ab CHANNEL_NAME | ab CITY | 99 COST_FIXED | 99 COST_VARIABLE |
|--------------|-------------|-------------|----------------|---------------|-----------------|-----------|---------------|------------------|
| 3,220,275 | 8,117 | 57 | N Weinbach Ave | North America | Online | Montreal | 51.83 | 333,9300 |
| 2,700,578 | 15,111 | 50 808 | A Pamalee Dr | West | Store | Pune City | 3,870.68 | 554,6000 |

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud interface for managing Data Flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. A search bar and sorting options are also present. The main table lists various data flows, each with a small icon, name, description, owner, modified date, and status. A context menu is open over the second item in the list, "DF-DataLoad2DB". The menu options are: Run, Open, New schedule, Inspect, and Delete. The URL at the bottom of the page is oacv903virtualappl-wiki903c7-qj78rect.srv.ravcloud.com/dv/ui/project.jsp?pageid=datasources#.

| Type | Name | Description | Owner | Modified | Status |
|------|--|-------------|-------|------------|--------|
| »» | DF-DataLoad2DB | | Admin | Just now | |
| »» | Naive Bayes - Attrition Training | | Admin | 5 days ago | |
| »» | Naive Bayes Apply Model - Attrition Prediction | | Admin | 6 days ago | |
| »» | Attrition Prediction | | Admin | 6 days ago | |
| »» | DF Sales Opty | | Admin | 6 days ago | |
| »» | DF Sales Lead | | Admin | 6 days ago | |
| »» | DF Lead - Sample Demo | | Admin | 6 days ago | |
| »» | DF Quote - Sample Demo | | Admin | 6 days ago | |
| »» | DF Order - Sample Demo | | Admin | 6 days ago | |
| »» | DF Lead to Order - Sample Demo | | Admin | 6 days ago | |
| »» | DF Campaign - Sample Demo | | Admin | 6 days ago | |
| »» | DF Quote | | Admin | 6 days ago | |
| »» | DF Counts per Stage | | Admin | 6 days ago | |
| »» | DF Counts per Stage - Sample Demo | | Admin | 6 days ago | |

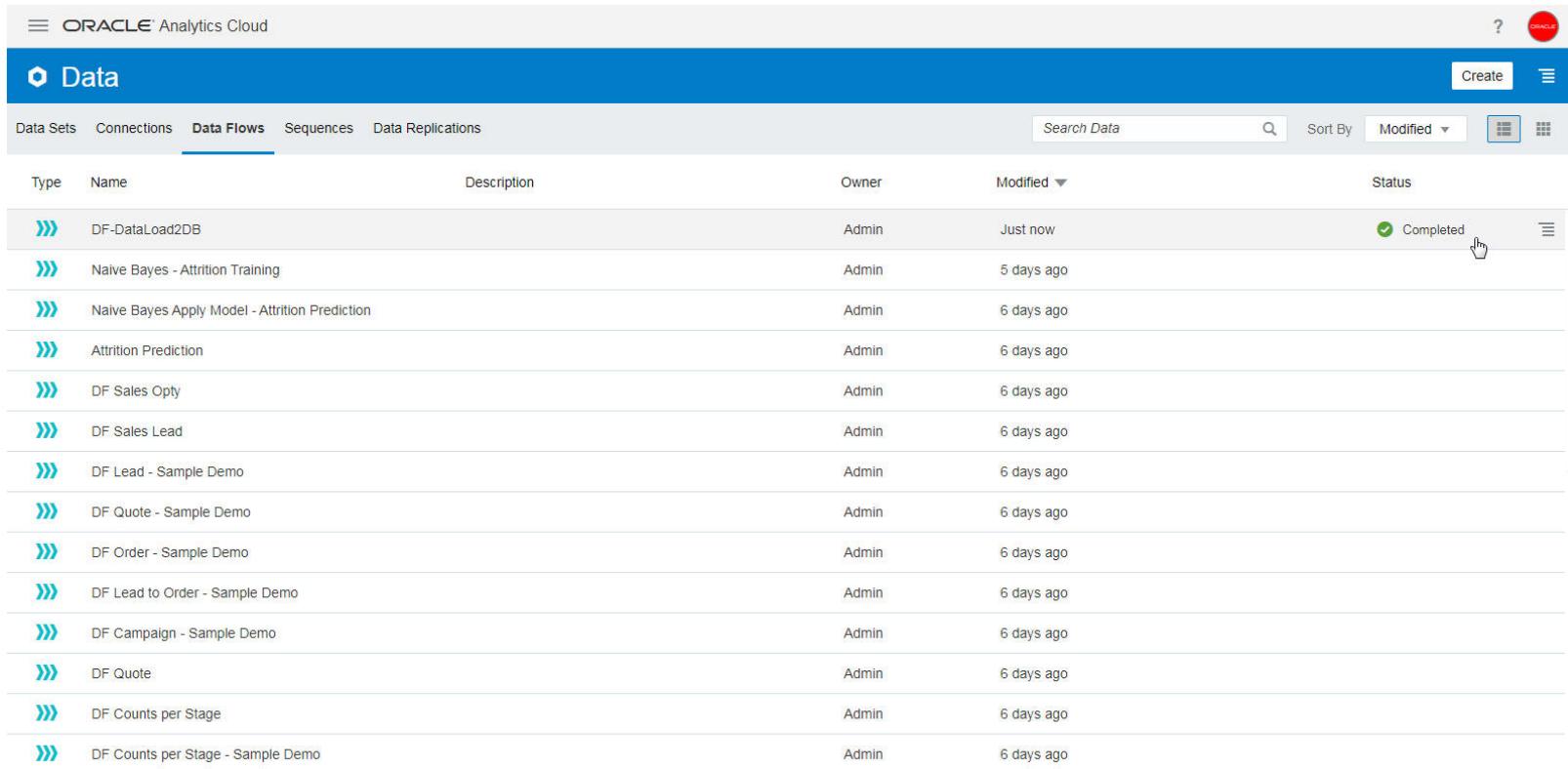
Assignment Screens: Store Data Flow output to a Database



The screenshot shows the Oracle Analytics Cloud interface for managing Data Flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. A search bar and sorting options are also present. The main content area displays a table of data flows, each with a small icon, name, description, owner, modified date, and status (e.g., Running). The table has columns for Type, Name, Description, Owner, Modified, and Status.

| Type | Name | Description | Owner | Modified | Status |
|------|--|-------------|-------|------------|--|
| »» | DF-DataLoad2DB | | Admin | Just now | <input checked="" type="radio"/> Running |
| »» | Naive Bayes - Attrition Training | | Admin | 5 days ago | |
| »» | Naive Bayes Apply Model - Attrition Prediction | | Admin | 6 days ago | |
| »» | Attrition Prediction | | Admin | 6 days ago | |
| »» | DF Sales Opty | | Admin | 6 days ago | |
| »» | DF Sales Lead | | Admin | 6 days ago | |
| »» | DF Lead - Sample Demo | | Admin | 6 days ago | |
| »» | DF Quote - Sample Demo | | Admin | 6 days ago | |
| »» | DF Order - Sample Demo | | Admin | 6 days ago | |
| »» | DF Lead to Order - Sample Demo | | Admin | 6 days ago | |
| »» | DF Campaign - Sample Demo | | Admin | 6 days ago | |
| »» | DF Quote | | Admin | 6 days ago | |
| »» | DF Counts per Stage | | Admin | 6 days ago | |
| »» | DF Counts per Stage - Sample Demo | | Admin | 6 days ago | |

Assignment Screens: Store Data Flow output to a Database



The screenshot shows the Oracle Analytics Cloud interface for managing Data Flows. The top navigation bar includes links for Data Sets, Connections, Data Flows (which is the active tab), Sequences, and Data Replications. A search bar and sorting options are also present. The main content area displays a table of data flows, each with a status indicator (green checkmark for Completed) and a delete icon.

| Type | Name | Description | Owner | Modified | Status |
|------|--|-------------|-------|------------|-----------|
| »» | DF-DataLoad2DB | | Admin | Just now | Completed |
| »» | Naive Bayes - Attrition Training | | Admin | 5 days ago | |
| »» | Naive Bayes Apply Model - Attrition Prediction | | Admin | 6 days ago | |
| »» | Attrition Prediction | | Admin | 6 days ago | |
| »» | DF Sales Opty | | Admin | 6 days ago | |
| »» | DF Sales Lead | | Admin | 6 days ago | |
| »» | DF Lead - Sample Demo | | Admin | 6 days ago | |
| »» | DF Quote - Sample Demo | | Admin | 6 days ago | |
| »» | DF Order - Sample Demo | | Admin | 6 days ago | |
| »» | DF Lead to Order - Sample Demo | | Admin | 6 days ago | |
| »» | DF Campaign - Sample Demo | | Admin | 6 days ago | |
| »» | DF Quote | | Admin | 6 days ago | |
| »» | DF Counts per Stage | | Admin | 6 days ago | |
| »» | DF Counts per Stage - Sample Demo | | Admin | 6 days ago | |

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data interface. The top navigation bar includes 'ORACLE Analytics Cloud' and a 'Data' icon. Below the bar, there are tabs for 'Data Sets', 'Connections', 'Data Flows', 'Sequences', and 'Data Replications'. A search bar and a 'Sort By' dropdown are also present. A context menu is open over the 'TargetRevenue' dataset, listing options: 'Create Project', 'Open', 'Inspect' (which is highlighted with a mouse cursor), 'Duplicate', and 'Delete'. The main table lists various datasets with columns for Type, Name, Description, Owner, Modified, and Refreshed.

| Type | Name | Description | Owner | Modified | Refreshed |
|----------|-----------------------------|---|-------|------------|--------------|
| FACT_SET | FACT_REVENUE | External Data Set | Admin | Just now | Just now |
| FACT_SET | TargetRevenue | | Admin | Just now | Just now |
| FACT_SET | HKLINEORDER | External Data Set | Admin | 9:28 AM | 9:28 AM |
| FILE | Payroll | Uploaded from Payroll.xlsx. | Admin | 3:23 AM | 3:23 AM |
| FILE | HR-Leavers | Uploaded from HR-Leavers.xlsx. | Admin | 3:15 AM | 3:15 AM |
| FILE | Employee Attrition | Uploaded from Employee Attrition.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| FILE | NPA analysis | Uploaded from EFPA.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| FILE | Metrostations per metrolijn | Uploaded from Metrostations per metrolijn.xlsx. | Admin | 4 days ago | 4 days ago |
| FILE | student-mat_test | Uploaded from student-mat.csv. | Admin | 4 days ago | 4 days ago |
| FILE | datos_segmentacion | Uploaded from datos_segmentacion.xlsx. | Admin | 4 days ago | 4 days ago |
| FILE | Attrition Predict | Uploaded from Attrition Predict.xlsx. | Admin | 4 days ago | 6 days ago |
| FILE | Stats universidades 2016 | | Admin | 4 days ago | Apr 1, 2019 |
| FILE | Campaign test | Uploaded from Campaign.xlsx. | Admin | 4 days ago | 4 days ago |
| FILE | US Inventory | Uploaded from US Inventory.xlsx. | Admin | 5 days ago | 5 days ago |

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud interface for managing data sets. A modal window titled "TargetRevenue" is open, showing its "General" details. The "Name" field is set to "TargetRevenue". The "Type" dropdown is set to "Database Table". The "Connection" dropdown is set to "TargetDB". The "Database Type" dropdown is set to "Oracle Autonomous Transaction Processing". The "Table" dropdown is set to "BICS_SAMPLEAPP_TARGE...". Under "Data Access", the "Live" option is selected, which is described as returning latest data from a live source. Below this, the "Automatic Caching" option is described as caching data for faster performance. In the background, a list of other data sets is visible, including FACT_REVENUE, TargetRevenue, HKLINEORDER, Payroll, HR-Leavers, Employee Attrition, NPA analysis, Metrolstations per metrolijn, student-mat_test, datos_segmentacion, Attrition Predict, Stats universidades 2016, Campaign test, and US inventory. The "US inventory" entry has a note below it stating "Uploaded from US Inventory.xlsx." and "Admin" with a timestamp of "5 days ago".

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud interface for managing data sets. A modal dialog box is open for a data set named "TargetRevenue". The dialog has tabs for "General", "Data Elements", "Search", and "Access". The "General" tab is selected, showing details such as Name (TargetRevenue), Description (empty), Created On (Today at 2:32 PM), Modified On (Today at 2:19 PM), Certified By (Not yet certified), Owner (Admin), Type (Database Table), Connection (TargetDB), Database Type (Oracle Autonomous Transaction Processing), Table (BICS_SAMPLEAPP_TARGE...), and Data Access (Automatic Caching). The background shows a list of other data sets like FACT_REVENUE, TargetRevenue, and HKLINEORDER.

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud interface. On the left, there's a sidebar with a 'Data' icon and a list of datasets. The main area is a modal dialog titled 'TargetRevenue' under 'Data Set'. The 'General' tab is selected. Inside, the dataset details are listed:

| Setting | Value |
|---------------|---|
| Name | TargetRevenue |
| Description | (empty) |
| Created On | Today at 2:32 PM |
| Modified On | Today at 2:19 PM |
| Certified By | Not yet certified Certify |
| Owner | Admin |
| Type | Database Table |
| Connection | TargetDB |
| Database Type | Oracle Autonomous Transaction Processing |
| Table | BICS_SAMPLEAPP_TARGE... |
| Data Access | Automatic Caching |

At the top right of the dialog is a 'Close' button. In the bottom right corner of the dialog, there's a small note: 'Updated from Campaign.xlsx'.

Below the dialog, the main data list shows several other datasets with their last modified times:

| Dataset | Last Modified |
|--------------|---------------|
| Refreshed | Just now |
| Just now | Just now |
| 9:24 AM | 9:24 AM |
| 3:23 AM | 3:23 AM |
| 3:15 AM | 3:15 AM |
| Mar 29, 2019 | Mar 29, 2019 |
| 4 days ago | 4 days ago |
| 4 days ago | 4 days ago |
| 4 days ago | 4 days ago |
| 6 days ago | 6 days ago |
| Apr 1, 2019 | Apr 1, 2019 |
| 4 days ago | 4 days ago |

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data interface. The top navigation bar includes 'ORACLE Analytics Cloud' and a red notification icon. Below it is a blue header bar with the title 'Data'. The main content area is a table listing data sets. The columns are: Type, Name, Description, Owner, Modified, and Refreshed. A context menu is open over the row for 'TargetRevenue', showing options: Create Project, Open, Inspect, Reload Data (which is highlighted with a yellow box), Duplicate, and Delete.

| Type | Name | Description | Owner | Modified | Refreshed |
|-------|-----------------------------|---|-------|------------|--------------|
| Cloud | TargetRevenue | | Admin | Just now | Just now |
| Cloud | FACT_REVENUE | External Data Set | Admin | Just now | Just now |
| Cloud | HKLINEORDER | External Data Set | Admin | 9:28 AM | 9:24 |
| File | Payroll | Uploaded from Payroll.xlsx. | Admin | 3:23 AM | 3:23 |
| File | HR-Leavers | Uploaded from HR-Leavers.xlsx. | Admin | 3:15 AM | 3:15 |
| File | Employee Attrition | Uploaded from Employee Attrition.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| File | NPA analysis | Uploaded from EFPA.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| File | Metrostations per metrolijn | Uploaded from Metrostations per metrolijn.xlsx. | Admin | 4 days ago | 4 days ago |
| File | student-mat_test | Uploaded from student-mat.csv. | Admin | 4 days ago | 4 days ago |
| File | datos_segmentacion | Uploaded from datos_segmentacion.xlsx. | Admin | 4 days ago | 4 days ago |
| File | Attrition Predict | Uploaded from Attrition Predict.xlsx. | Admin | 4 days ago | 6 days ago |
| File | Stats universidades 2016 | | Admin | 4 days ago | Apr 1, 2019 |
| File | Campaign test | Uploaded from Campaign.xlsx. | Admin | 4 days ago | 4 days ago |
| File | US Inventory | Uploaded from US Inventory.xlsx. | Admin | 5 days ago | 5 days ago |

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data interface. The main table lists various data sets with columns for Type, Name, Description, Owner, Modified, and Refreshed. A modal dialog titled "Reload Data" is displayed over the table, indicating that "TargetRevenue was reloaded successfully." An "OK" button is visible at the bottom of the modal.

| Type | Name | Description | Owner | Modified | Refreshed |
|-------|-----------------------------|--|-------|------------|--------------|
| Cloud | TargetRevenue | | Admin | Just now | Just now |
| Cloud | FACT_REVENUE | External Data Set | | Just now | Just now |
| Cloud | HKLINEORDER | External Data Set | | 28 AM | 9:24 AM |
| File | Payroll | Uploaded from Payroll.xlsx | | 23 AM | 3:23 AM |
| File | HR-Leavers | Uploaded from HR-Leavers.xlsx | | 15 AM | 3:15 AM |
| File | Employee Attrition | Uploaded from Employee Attrition.xlsx | | Yesterday | Mar 29, 2019 |
| File | NPA analysis | Uploaded from NPA analysis.xlsx | | Yesterday | Mar 29, 2019 |
| File | Metrostations per metrolijn | Uploaded from Metrostations per metrolijn.xlsx | | 4 days ago | 4 days ago |
| File | student-mat_test | Uploaded from student-mat_test.xlsx | | 4 days ago | 4 days ago |
| File | datos_segmentacion | Uploaded from datos_segmentacion.xlsx. | Admin | 4 days ago | 4 days ago |
| File | Attrition Predict | Uploaded from Attrition Predict.xlsx. | Admin | 4 days ago | 6 days ago |
| File | Stats universidades 2016 | | Admin | 4 days ago | Apr 1, 2019 |
| File | Campaign test | Uploaded from Campaign.xlsx. | Admin | 4 days ago | 4 days ago |
| File | US Inventory | Uploaded from US Inventory.xlsx. | Admin | 5 days ago | 5 days ago |

Assignment Screens: Store Data Flow output to a Database

The screenshot shows the Oracle Analytics Cloud Data interface. The top navigation bar includes 'ORACLE Analytics Cloud' and a 'Data' icon. Below the bar, there are tabs for 'Data Sets', 'Connections', 'Data Flows', 'Sequences', and 'Data Replications'. A search bar and a 'Sort By' dropdown are also present. On the right, there are several icons for data management. A context menu is open over a dataset named 'TargetRevenue', with 'Create Project' highlighted.

| Type | Name | Description | Owner | Modified | Refreshed |
|-------|-----------------------------|---|-------|------------|--------------|
| Cloud | TargetRevenue | | Admin | Just now | Just now |
| Cloud | FACT_REVENUE | External Data Set | Admin | Just now | Just now |
| Cloud | HKLINEORDER | External Data Set | Admin | 9:28 AM | 9:24 |
| File | Payroll | Uploaded from Payroll.xlsx. | Admin | 3:23 AM | 3:23 |
| File | HR-Leavers | Uploaded from HR-Leavers.xlsx. | Admin | 3:15 AM | 3:15 |
| File | Employee Attrition | Uploaded from Employee Attrition.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| File | NPA analysis | Uploaded from EFPA.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| File | Metrostations per metrolijn | Uploaded from Metrostations per metrolijn.xlsx. | Admin | 4 days ago | 4 days ago |
| File | student-mat_test | Uploaded from student-mat.csv. | Admin | 4 days ago | 4 days ago |
| File | datos_segmentacion | Uploaded from datos_segmentacion.xlsx. | Admin | 4 days ago | 4 days ago |
| File | Attrition Predict | Uploaded from Attrition Predict.xlsx. | Admin | 4 days ago | 6 days ago |
| File | Stats universidades 2016 | | Admin | 4 days ago | Apr 1, 2019 |
| File | Campaign test | Uploaded from Campaign.xlsx. | Admin | 4 days ago | 4 days ago |
| File | US Inventory | Uploaded from US Inventory.xlsx. | Admin | 5 days ago | 5 days ago |

Analyze Text

What are the sentiments expressed ?

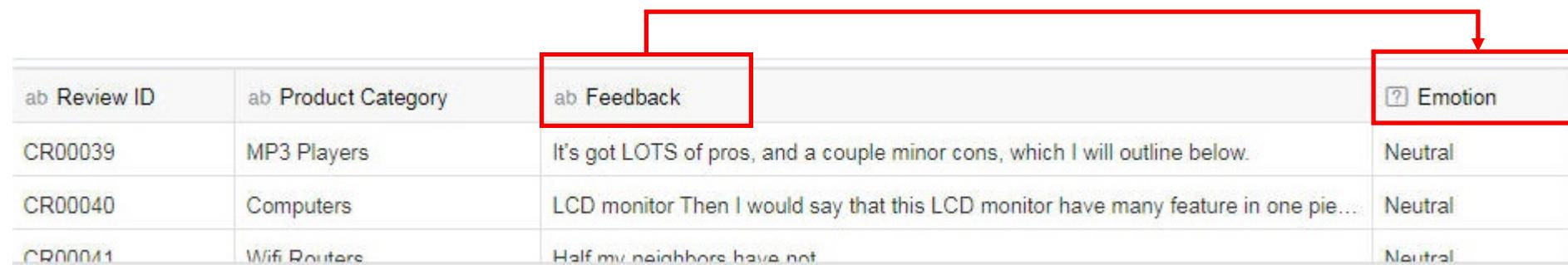


Section 3: Data Flow Deep Dive with Oracle Analytics

Create Sentiment Analysis with Data Flow

Understand the underling emotion expressed in a text

- Data Flow helps you find the emotion from a “Text” data-type field
- It creates a new output column called “emotion” on your source data set
- This new column, can then be used for your sentiment analysis
- In case of DV Desktop, you can customize the sentiment directory and emotion categories, if required

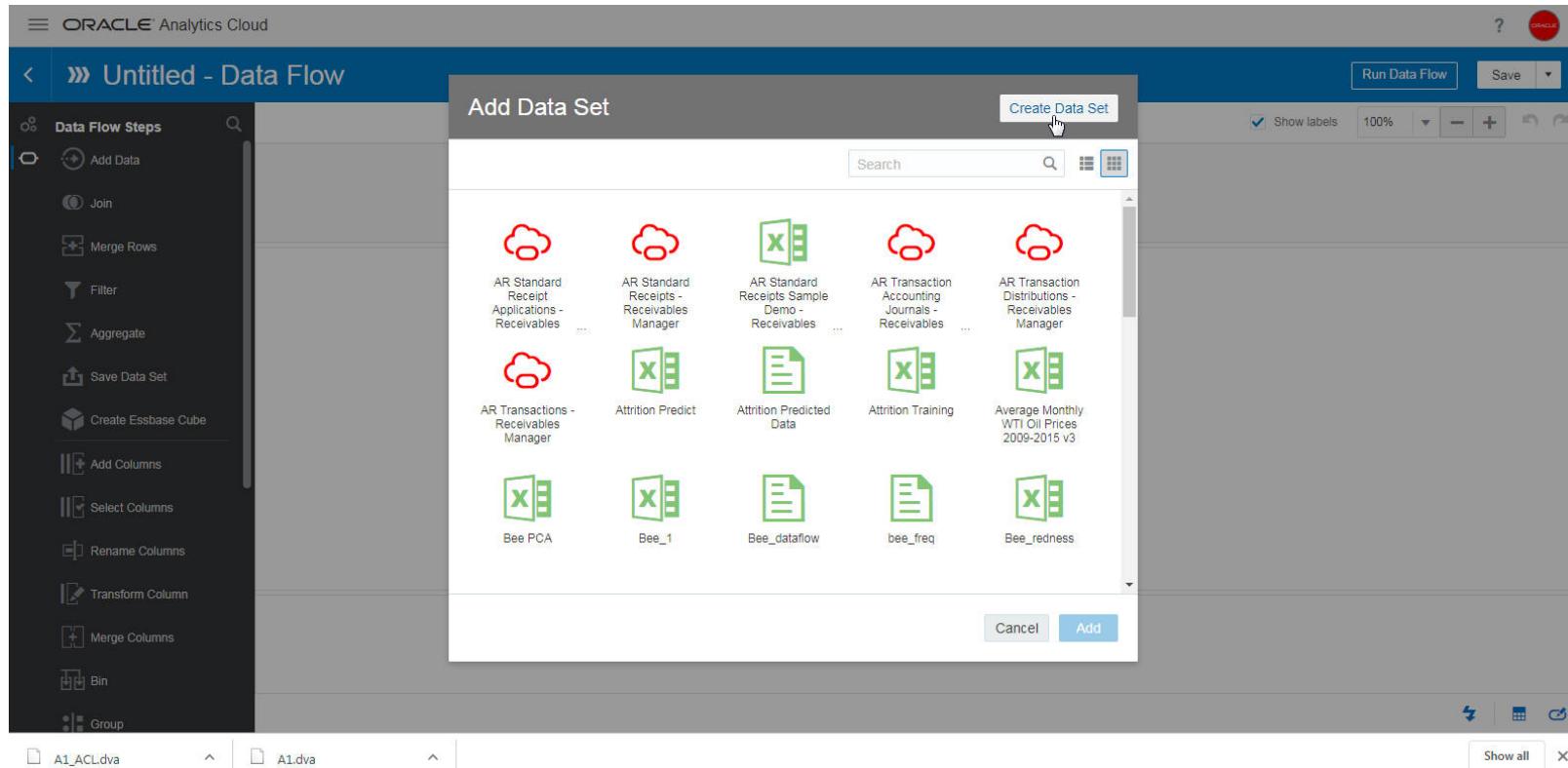


| ab Review ID | ab Product Category | ab Feedback | Emotion |
|--------------|---------------------|--|---------|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. | Neutral |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... | Neutral |
| CR00041 | Wifi Routers | Half my neighbors have not | Neutral |

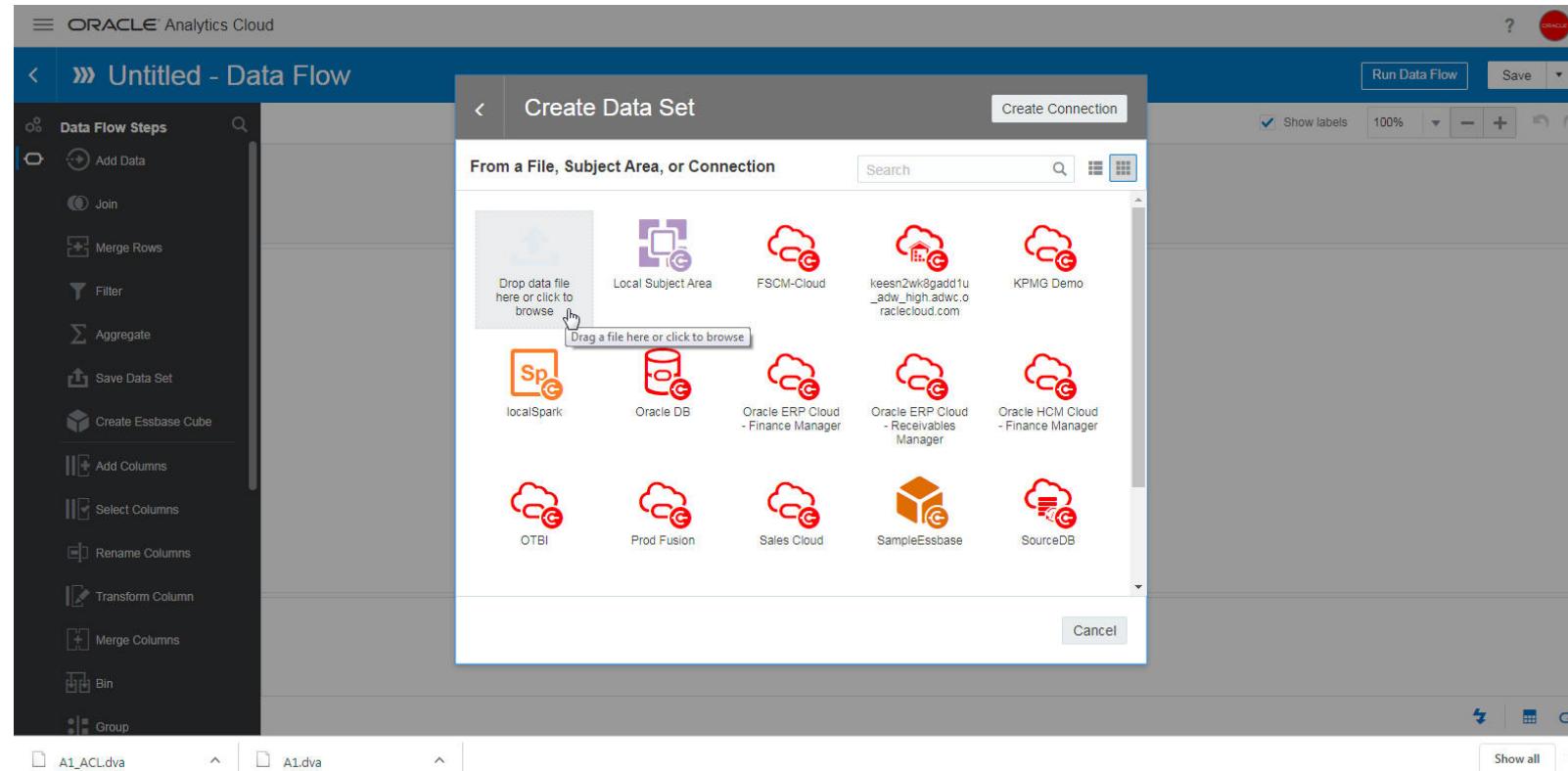
Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Home screen. At the top, there's a search bar with the placeholder "What are you interested in?". Below it is a "What's New" section featuring a grid of 12 cards. Some cards are red (e.g., "TargetRevenue Database" updated at 2:33 PM) and some are green (e.g., "Payroll File" uploaded from Payroll.xlsx). A large, semi-transparent "Create" modal is overlaid on the screen. It has tabs for "Project", "Data Set", and "Data Flow", with "Data Flow" currently selected. Other tabs include "Sequence", "Connection", "Data Replication", and "Replication Connection". The "Data Flow" tab has a sub-menu with options like "Create Project", "Create Sequence", etc. In the background, there are more cards and a "Show all" button.

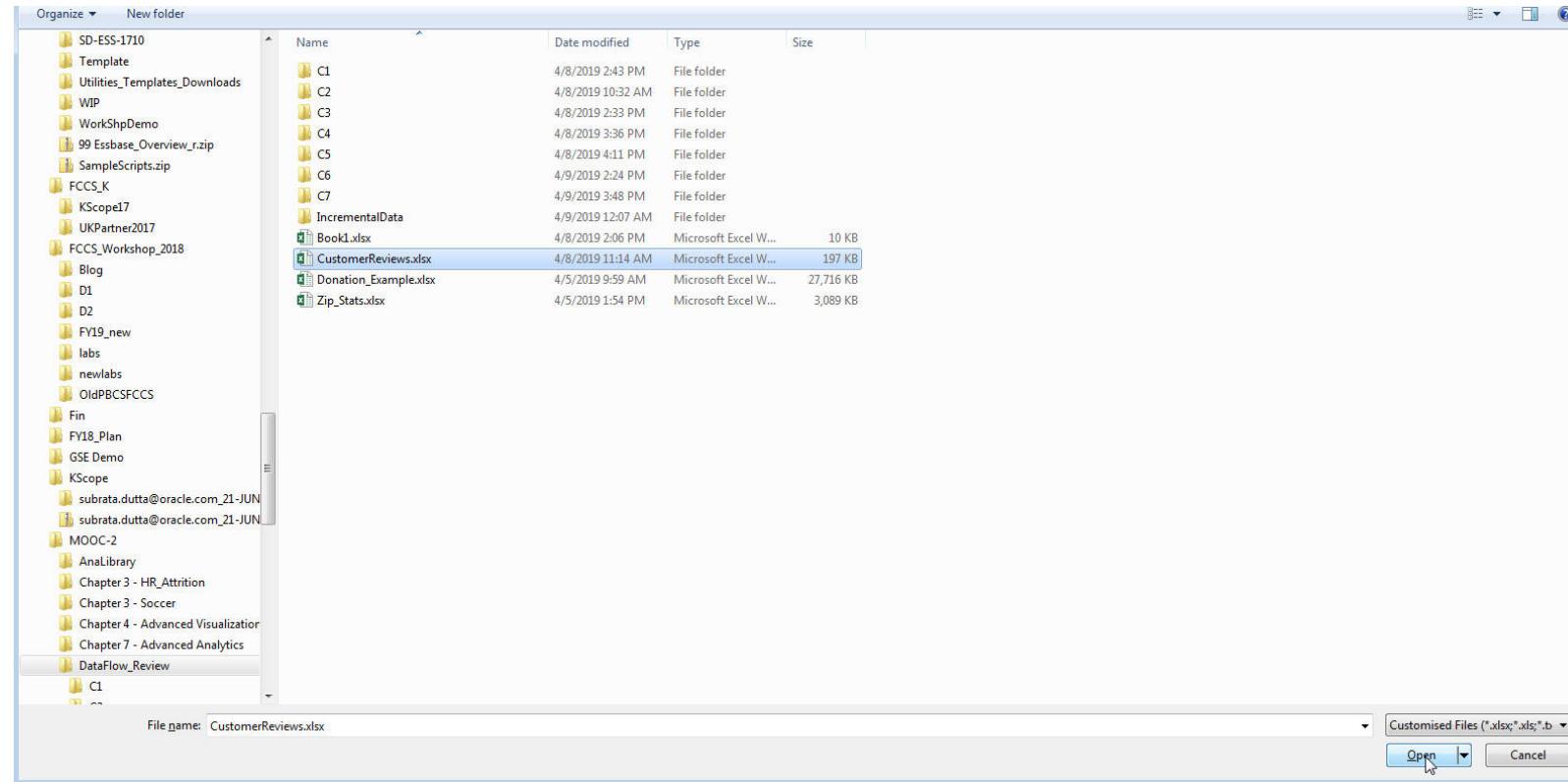
Assignment Screens: Create Sentiment Analysis with Data Flow



Assignment Screens: Create Sentiment Analysis with Data Flow



Assignment Screens: Create Sentiment Analysis with Data Flow



Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The title bar reads "CustomerReviews - Data Flow". On the left, a sidebar titled "Data Flow Steps" lists various operations: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, and Group. The main area displays a table with the following data:

| Review ID | Product Category | Feedback |
|-----------|--------------------|---|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... |
| CR00041 | Wifi Routers | Half my neighbors have not. |
| CR00042 | Computers | Highly recommended. |
| CR00043 | Wifi Routers | After hours of searching the internet , I was disappointed to find that D-Link does ... |
| CR00044 | Computers | monitor, picture quality I've viewed numerous different monitor models since I'm ... |
| CR00045 | Computers | Checked the reviews at several sites , all were favorable . |
| CR00046 | Bluetooth Speakers | I really just want quality sound for listening to my music at moderate levels while I'... |
| CR00047 | Wifi Routers | I have not contacted DLink . |
| CR00048 | Wifi Routers | It would have been four if I would n't have had to go through all of this hassle to ge... |

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The title bar reads "CustomerReviews - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, and Group. The main workspace contains a step titled "CustomerReviews" with a delete icon. Below it, a "Add Data - CustomerReviews" panel is open, showing a "Data Set" of "CustomerReviews" with a "Select..." button. The "Columns" section has "All (3)" selected, showing columns "Name", "Review ID", "Product Category", and "Feedback", all of which are checked. A preview table shows two rows of data: CR00039 (MP3 Players) with feedback "It's got LOTS of pros, and a couple minor cons, which I will outline below.", and CR00040 (Computers) with feedback "LCD monitor Then I would say that this LCD monitor have many feature in one pie...". At the bottom, there are tabs for "A1_ACL.dva" and "A1.dva", and buttons for "Show all" and "X".

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The title bar reads "CustomerReviews - Data Flow". The left sidebar lists various data flow steps: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, Branch, Cumulative Value, Time Series Forecast, Analyze Sentiment, Train Numeric Prediction, Train Multi-Classifier, Train Binary Classifier, Train Clustering, and Apply Model. The main workspace displays a table with two rows of customer reviews. The first row has Review ID CR00039, Product Category MP3 Players, and Feedback: "It's got LOTS of pros, and a couple minor cons, which I will outline below.". The second row has Review ID CR00040, Product Category Computers, and Feedback: "LCD monitor Then I would say that this LCD monitor have many feature in one pie...". The "Analyze Sentiment" step is highlighted with a blue border.

| Review ID | Product Category | Feedback |
|-----------|------------------|--|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... |

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface for a project titled "CustomerReviews - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, and Group. The main workspace displays a flow diagram with a "Customer..." step connected to an "Analyze Sentiment" step. Below the diagram, the "Analyze Sentiment" step is expanded to show its configuration. Under "Outputs", there is a table with one row: "Create" (checkbox checked), "Output" (text input "emotion"), and "Column Name" (text input "Emotion"). Under "Parameters", there is a table with three rows: "Text To Analyze" (text input "Select a column") and two rows of data: CR00039 (Review ID) and MP3 Players (Product Category). The third row is partially visible: CR00040 (Review ID) and Computers (Product Category). A modal window titled "Available Data" is open, listing "Review ID", "Product Category", and "Feedback". The "Feedback" item is selected. The text area below the table contains a sample review: "It's got LOTS of pros, and a couple of cons, which I will outline below. LCD monitor Then I would say that this LCD monitor have many feature in one pie...". At the bottom of the interface, there are tabs for "A1_ACL.dva" and "A1.dva", and a toolbar with "Run Data Flow", "Save", and other controls.

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface for a project titled "CustomerReviews - Data Flow".

Data Flow Steps:

- Add Data
- Join
- Merge Rows
- Filter
- Aggregate
- Save Data Set
- Create Essbase Cube
- Add Columns
- Select Columns
- Rename Columns
- Transform Column
- Merge Columns
- Bin
- Group

Analyze Sentiment:

Outputs:

- Create Output Column Name: emotion (selected)
- Emotion

Parameters:

- * Text To Analyze: Feedit
- Train Numeric Prediction
- Train Multi-Classifier
- Train Binary Classifier
- Train Clustering
- Apply Model

Table View:

| ab Review ID | ab Product Category | ab Feedback |
|--------------|---------------------|--|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... |

Bottom Navigation:

- A1_ACL.dva
- A1.dva

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The top navigation bar includes the Oracle logo, the title "CustomerReviews - Data Flow", and buttons for "Run Data Flow", "Save", and a red "Cancel" button. On the left, a sidebar titled "Data Flow Steps" lists various operations: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a flow diagram with three nodes: "Customer...", "Analyze Sentiment", and "Add Columns". The "Add Columns" node is currently selected. Below the diagram, a modal dialog titled "Add Columns" is open. It shows a table with one row for "New Column1" and a column header "Name" with the value "Count". A message "Calculation validated" is displayed in a green box. To the right of the table is a search bar and a sidebar with categories: Operators, Aggregate, String, and Math. At the bottom of the dialog are "Validate" and "Apply" buttons. In the bottom right corner of the main workspace, there are icons for "Run Data Flow", "Save", and "Cancel".

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface for a project titled "CustomerReviews - Data Flow".

Data Flow Steps:

- Add Data
- Join
- Merge Rows
- Filter
- Aggregate
- Save Data Set
- Create Essbase Cube
- Add Columns
- Select Columns
- Rename Columns
- Transform Column
- Merge Columns
- Bin
- Group
- Branch

Workflow:

```
graph LR; A[Customer...] --> B[Analyze Sentiment]; B --> C[Add Columns]
```

Add Columns Panel:

Shows a table with one column named "Count" and a value of 1. Below the table are several data manipulation icons:

- Add Columns
- Select Columns
- Rename Columns
- Transform Column
- Merge Columns
- Bin
- Group
- Branch
- Cumulative Value
- Time Series Forecast
- Analyze Sentiment
- Train Numeric Prediction
- Train Multi-Classifier
- Train Binary Classifier
- Train Clustering
- Apply Model

Save Data Button:

A large button labeled "Save Data" is highlighted with a red circle and a hand cursor icon.

Search Bar:

A search bar with the placeholder "Select a function to see description" and a dropdown menu containing:

- Operators
- Aggregate
- String
- Math
- CalendarDate

Data Preview:

| ab Review ID | ab Product Category | ab Feedback | Emotion | Count |
|--------------|---------------------|--|---------|-------|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. | Neutral | 1 |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... | Neutral | 1 |
| CR00041 | Wifi Routers | Half my neighbors have not | Neutral | 1 |

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. At the top, there's a blue header bar with the title "DF-Customer Sentiment Analysis - Data Flow". Below the header, the main workspace displays a data flow diagram consisting of four steps connected sequentially: "Customer...", "Analyze Sentiment", "Add Columns", and a final step with a "Save Data" icon. To the left of the workspace is a sidebar titled "Data Flow Steps" containing various icons for different operations like "Add Data", "Join", "Merge Rows", "Filter", "Aggregate", "Save Data Set", "Create Essbase Cube", "Add Columns", "Select Columns", "Rename Columns", "Transform Column", "Merge Columns", "Bin", "Group", and "Branch". On the right side of the workspace, there's a "Save Data Set" configuration panel. It includes fields for "Name" (set to "CustomerSentimentAnalysis"), "Description", "Save data to" (set to "Data Set Storage"), "When Run" (unchecked), and "Feedback" (set to "Attribute"). A dropdown menu for "Emotion" is open, showing options like "Count", "Measure", and "Sum". Below this panel is a table view showing three rows of data:

| ab Review ID | ab Product Category | ab Feedback | Emotion | Count |
|--------------|---------------------|--|---------|-------|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. | Neutral | 1 |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... | Neutral | 1 |
| CR00041 | Wifi Routers | Half my neighbors have not... | Neutral | 1 |

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. On the left, a sidebar lists various data flow steps: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a workflow: Customer... → Analyze Sentiment → Add Columns → Save Data. A 'Save Data Set' dialog is open, prompting for a Name (CustomerSentimentAnalysis) and Description. An 'OK' button is highlighted with a cursor. In the background, a table view shows customer reviews with columns: Review ID, Product Category, Feedback, Emotion, and Count. One row of feedback is visible: "It's got LOTS of pros, and a couple minor cons, which I will outline below." The sentiment is listed as Neutral.

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The top navigation bar displays 'ORACLE Analytics Cloud' and the title 'DF-Customer Sentiment Analysis - Data Flow'. The main workspace contains a data flow diagram with four steps: 'Customer...', 'Analyze Sentiment', 'Add Columns', and 'Save Data'. The 'Save Data' step is highlighted with a blue background. The 'Run Data Flow' button is visible in the top right of the workspace. To the left, a sidebar lists various data flow steps: Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The 'Add Columns' step is currently selected. Below the workspace is a 'Save Data Set' configuration panel. It includes fields for 'Name' (CustomerSentimentAnalysis), 'Description', 'Save data to' (Data Set Storage), 'When Run' (checkbox), and 'Feedback' (Emotion). A preview table shows three rows of data:

| ab Review ID | ab Product Category | ab Feedback | Emotion | Count |
|--------------|---------------------|--|---------|-------|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. | Neutral | 1 |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... | Neutral | 1 |
| CR00041 | Wifi Routers | Half my neighbors have not | Neutral | 1 |

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The top navigation bar includes the Oracle logo, a search icon, and a red circular button. The main title is "DF-Customer Sentiment Analysis - Data Flow". On the left, a sidebar lists various data flow steps: Data Flow Steps, Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a data flow diagram with three nodes: "Customer..." (Input), "Analyze Sentiment" (Process), and "Add Columns" (Output). Below the diagram is a "Save Data Set" dialog. The "Name" field is set to "CustomerSentimentAnalysis". The "Columns" section shows a table with columns: Name, Treat As, and Default Aggregation. The "Description" field contains "Review ID". The "Save data to" dropdown is set to "Data Set Storage". The "When Run" dropdown is set to "Prompt to specify Data Set". The "Feedback" dropdown is set to "Attribute". The "Emotion" dropdown is set to "Attribute". The "Count" dropdown is set to "Measure" with "Sum" selected. A preview table below shows three rows of data:

| ab Review ID | ab Product Category | ab Feedback | cb Emotion | bb Count |
|--------------|---------------------|--|------------|----------|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. | Neutral | 1 |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... | Neutral | 1 |
| CR00041 | Wifi Routers | Half my neighbors have not | Neutral | 1 |

Assignment Screens: Create Sentiment Analysis with Data Flow

The screenshot shows the Oracle Analytics Cloud Data Flow interface. The top navigation bar includes 'ORACLE Analytics Cloud', a search icon, and a red circular button. The main title is 'DF-Customer Sentiment Analysis - Data Flow'. On the left, a sidebar lists various data flow steps: Go back, Data Flow Steps (selected), Add Data, Join, Merge Rows, Filter, Aggregate, Save Data Set, Create Essbase Cube, Add Columns, Select Columns, Rename Columns, Transform Column, Merge Columns, Bin, Group, and Branch. The main workspace displays a data flow diagram with four nodes: 'Customer...', 'Analyze Sentiment', 'Add Columns', and a blue 'Save Data' button. Below the diagram is a 'Save Data Set' configuration panel. It shows the dataset name 'CustomerSentimentAnalysis', columns for 'Review ID', 'Product Category', 'Feedback', 'Emotion', and 'Count', and settings for 'Treat As' (Attribute) and 'Default Aggregation' (Sum). At the bottom, there is a table view of the data:

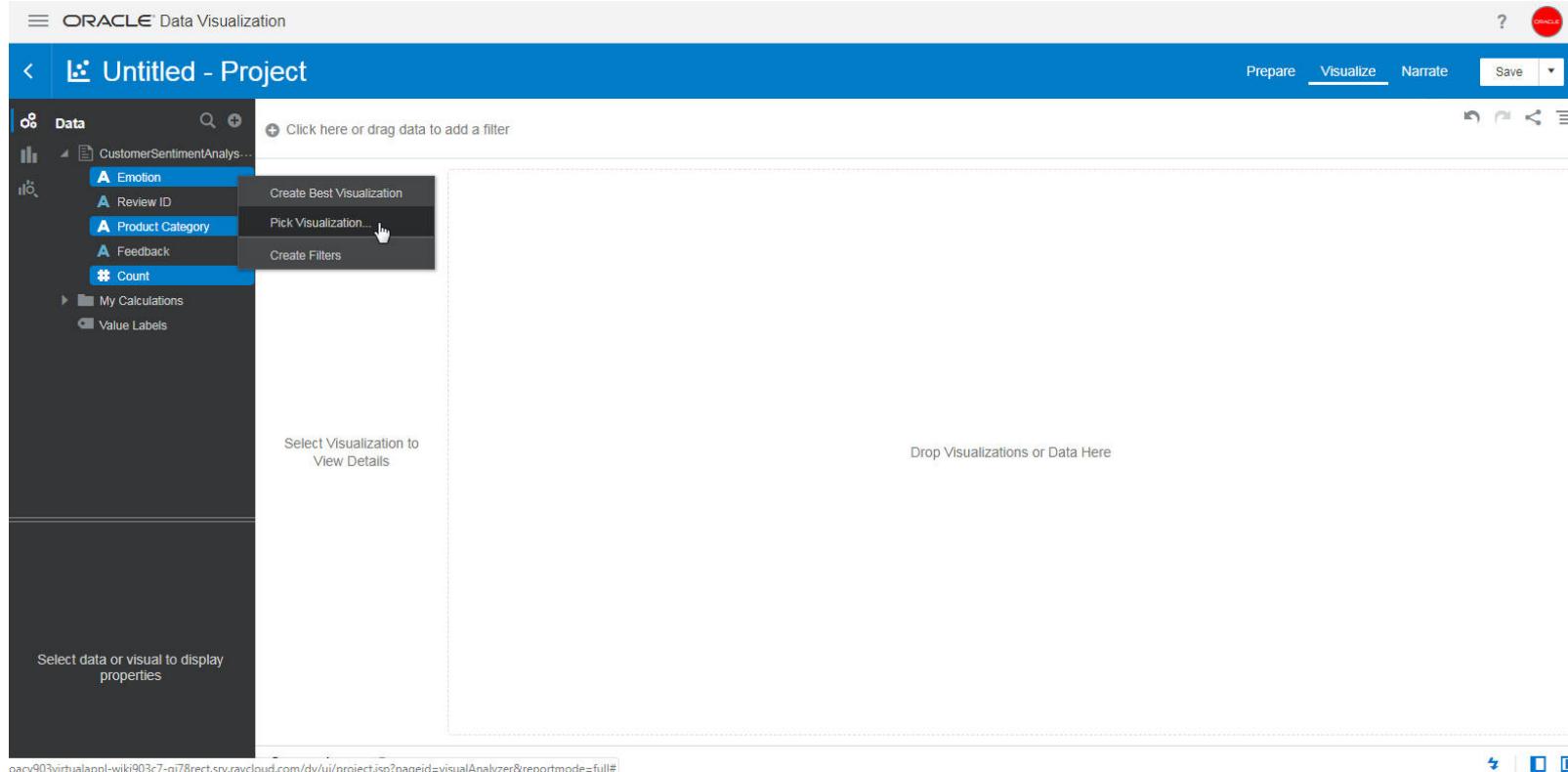
| ab Review ID | ab Product Category | ab Feedback | Emotion | Count |
|--------------|---------------------|--|---------|-------|
| CR00039 | MP3 Players | It's got LOTS of pros, and a couple minor cons, which I will outline below. | Neutral | 1 |
| CR00040 | Computers | LCD monitor Then I would say that this LCD monitor have many feature in one pie... | Neutral | 1 |
| CR00041 | Wifi Routers | Half my neighbors have not | Neutral | 1 |

Assignment Screens: Create Sentiment Analysis with Data Flow

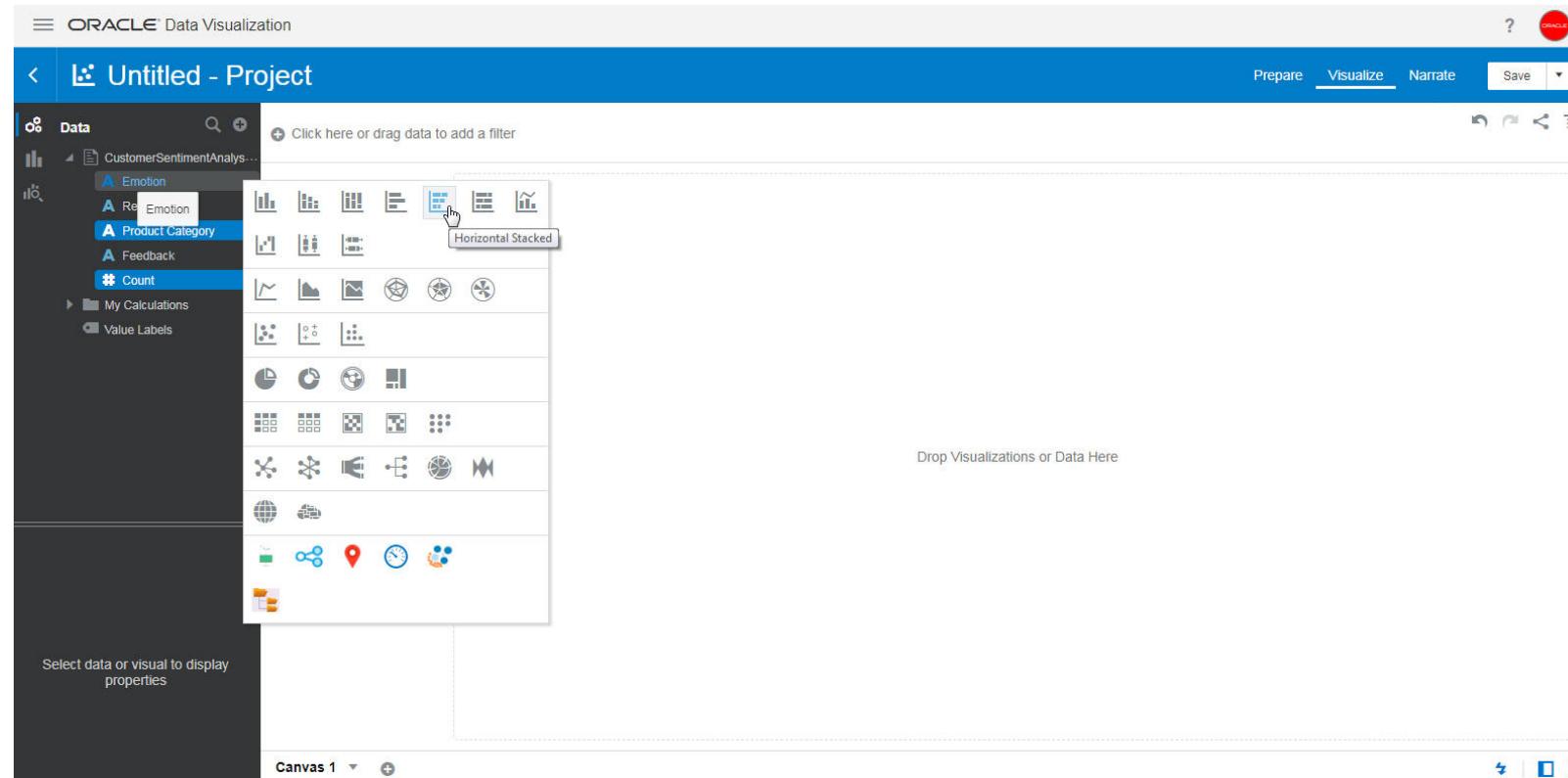
The screenshot shows the Oracle Analytics Cloud interface for managing data sets. The top navigation bar includes links for ORACLE Analytics Cloud, Help, Logout, Create, and a search bar labeled "Search Data". Below the header, there are tabs for Data Sets, Connections, Data Flows, Sequences, and Data Replications. The main area displays a table of data sets with columns for Type, Name, Description, Owner, Modified, and Refreshed. A context menu is open over the row for "CustomerSentimentAnalysis", listing options such as Create Project, Open, Inspect, Reload Data, Download File, Duplicate, and Delete.

| Type | Name | Description | Owner | Modified | Refreshed |
|-----------------------------|------|---|-------|----------------|--------------|
| CustomerSentimentAnalysis | | | Admin | Just now | Just now |
| CustomerReviews | | Uploaded from CustomerReviews.xlsx. | Admin | 12 minutes ago | 19 m |
| TargetRevenue | | | Admin | 2:33 PM | 2:33 |
| FACT_REVENUE | | External Data Set | Admin | 2:24 PM | 2:22 |
| HKLINEORDER | | External Data Set | Admin | 9:28 AM | 9:24 |
| Payroll | | Uploaded from Payroll.xlsx. | Admin | 3:23 AM | 3:23 |
| HR-Leavers | | Uploaded from HR-Leavers.xlsx. | Admin | 3:15 AM | 3:15 AM |
| Employee Attrition | | Uploaded from Employee Attrition.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| NPA analysis | | Uploaded from EFPA.xlsx. | Admin | Yesterday | Mar 29, 2019 |
| Metrostations per metrolijn | | Uploaded from Metrostations per metrolijn.xlsx. | Admin | 4 days ago | 4 days ago |
| student-mat_test | | Uploaded from student-mat.csv. | Admin | 4 days ago | 4 days ago |
| datos_segmentacion | | Uploaded from datos_segmentacion.xlsx. | Admin | 4 days ago | 4 days ago |
| Attrition Predict | | Uploaded from Attrition Predict.xlsx. | Admin | 4 days ago | 6 days ago |
| Stats universidades 2016 | | | Admin | 4 days ago | Apr 1, 2019 |

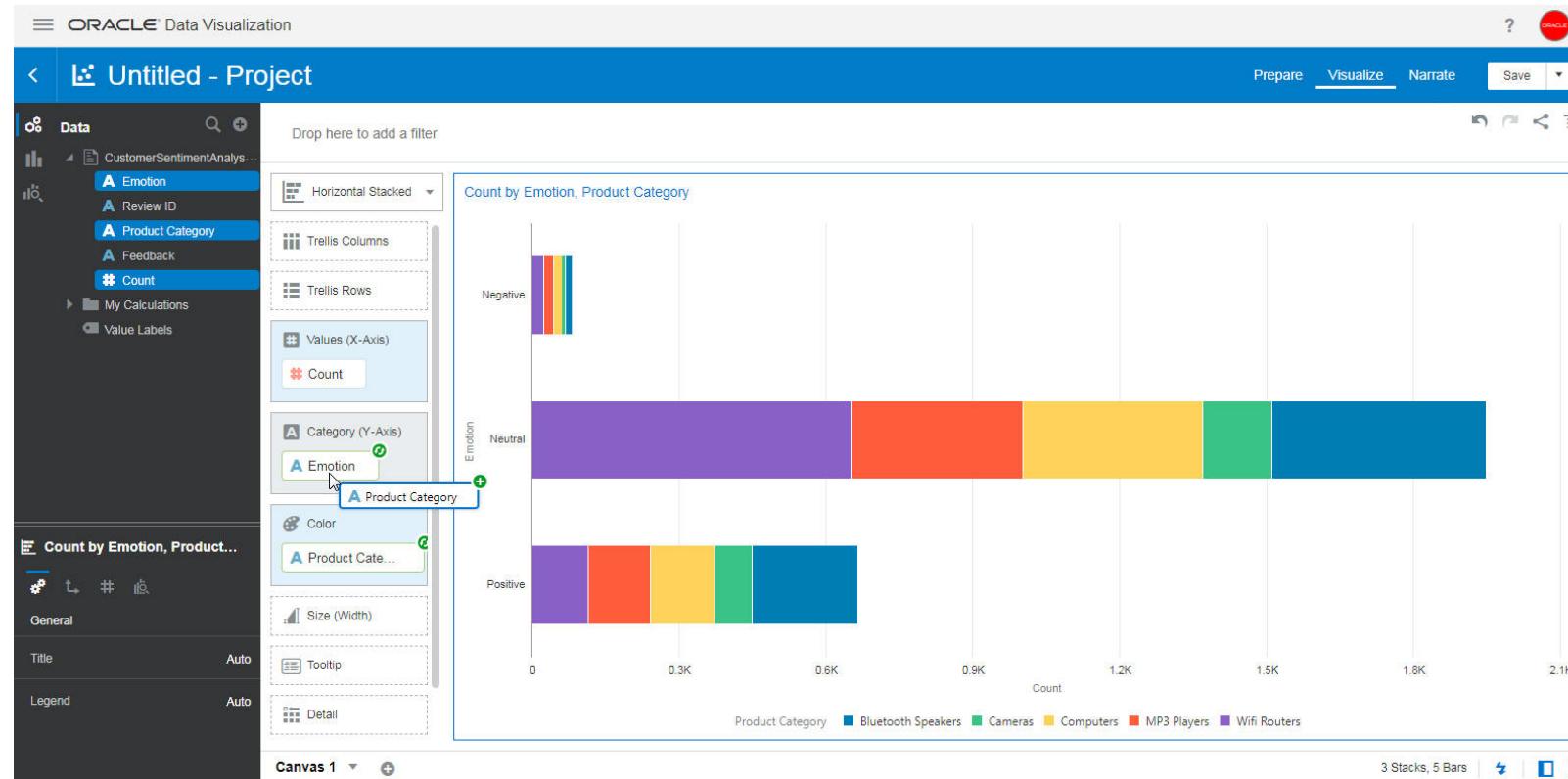
Assignment Screens: Create Sentiment Analysis with Data Flow



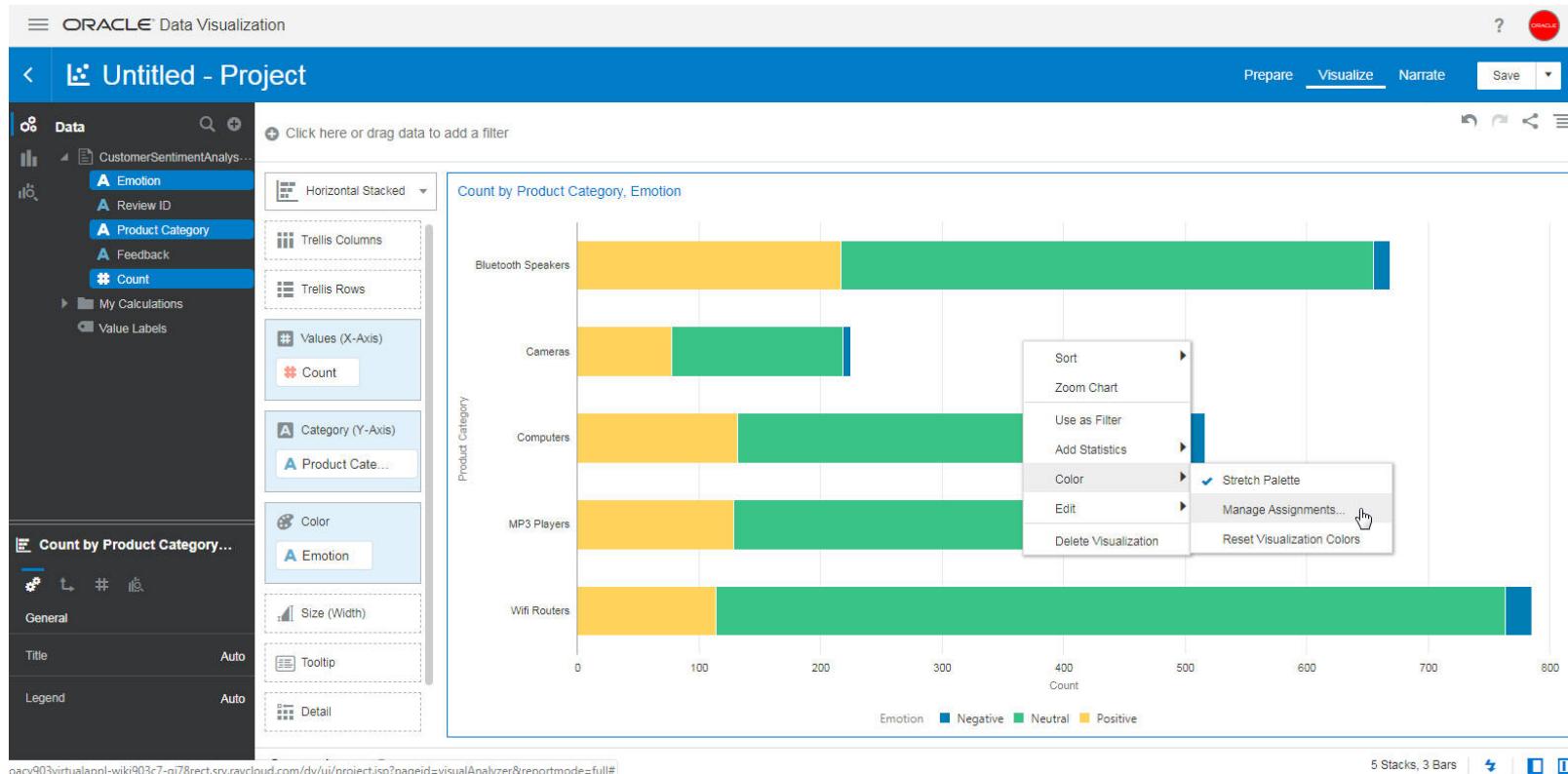
Assignment Screens: Create Sentiment Analysis with Data Flow



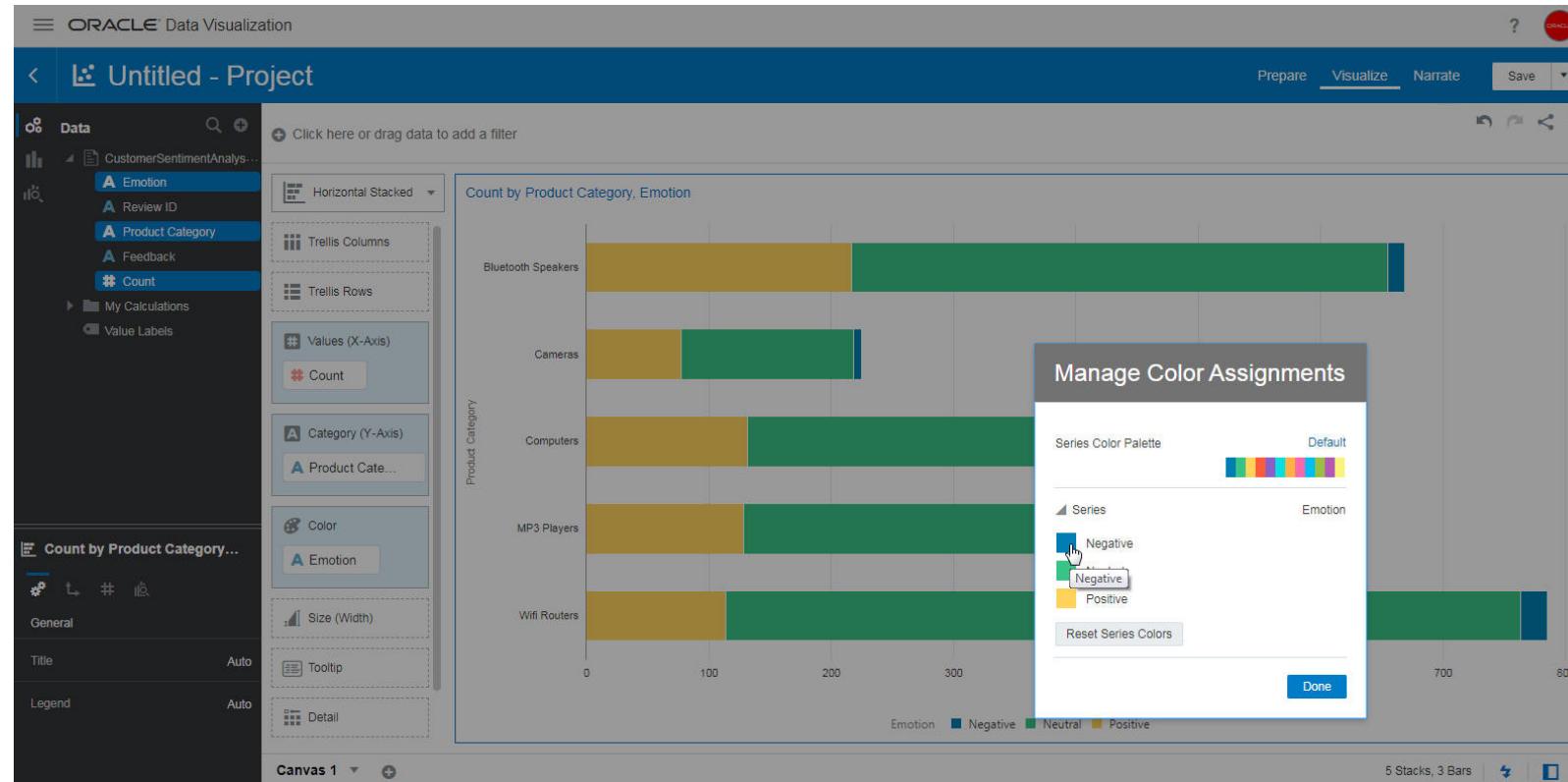
Assignment Screens: Create Sentiment Analysis with Data Flow



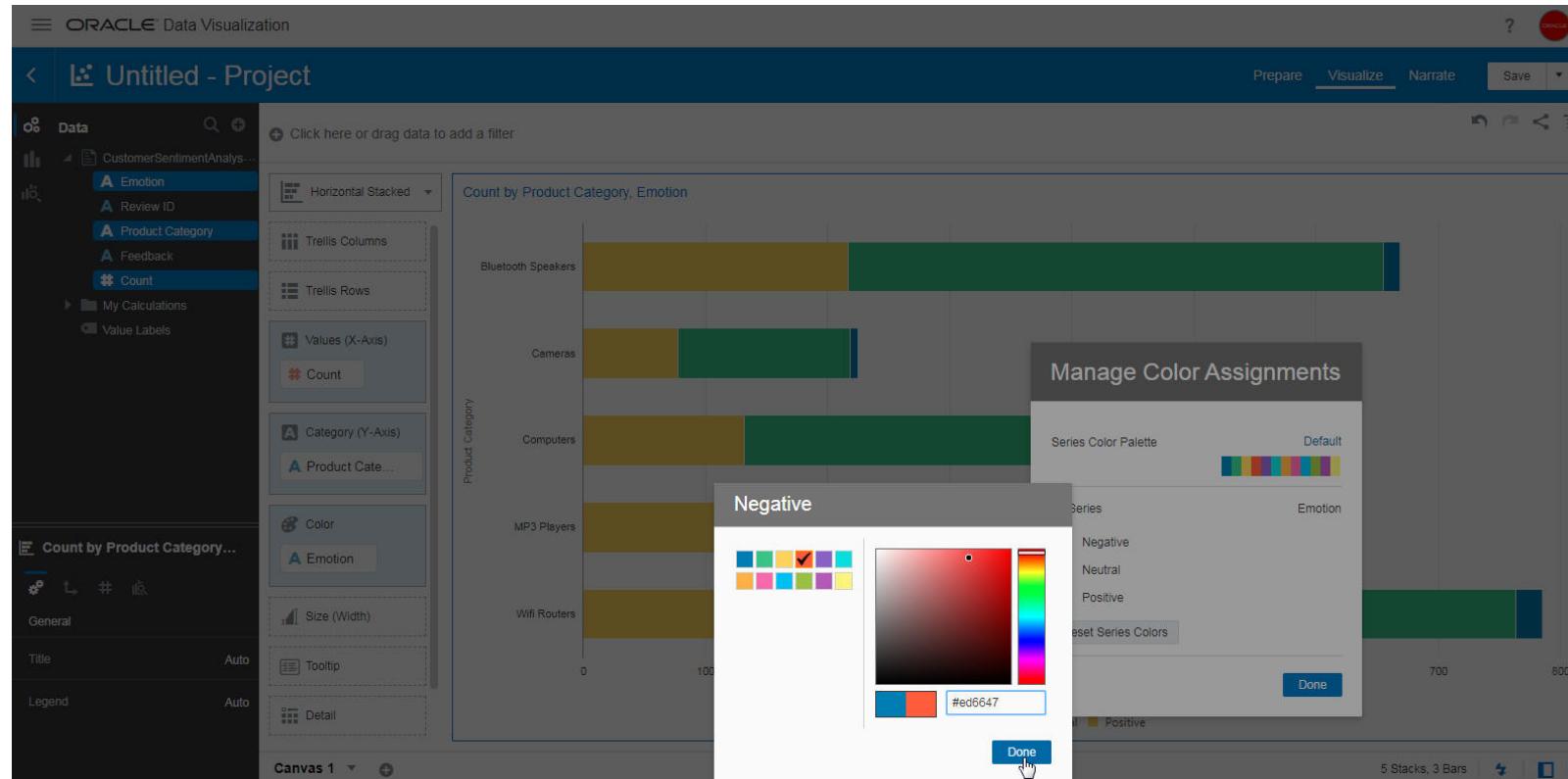
Assignment Screens: Create Sentiment Analysis with Data Flow



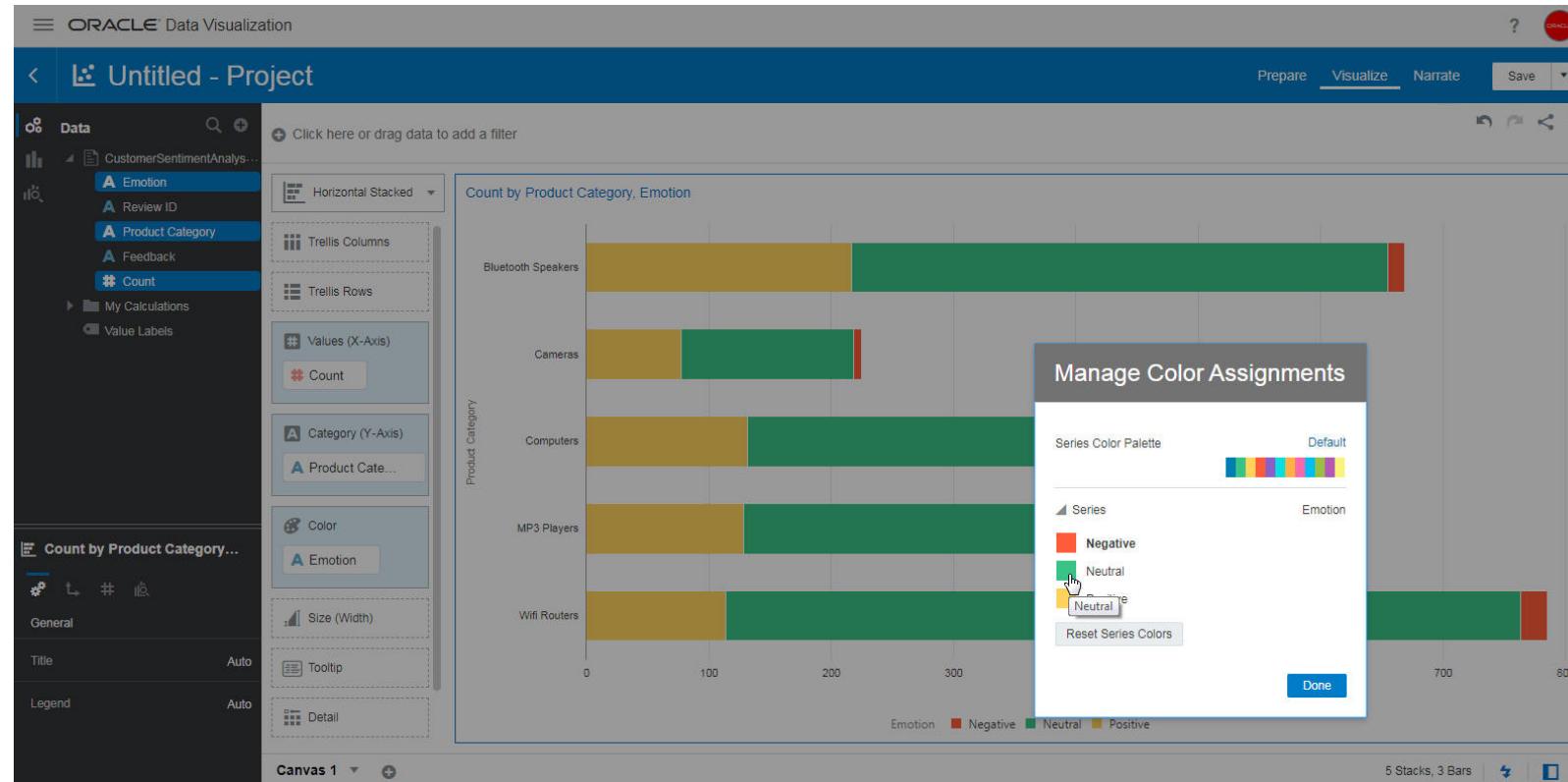
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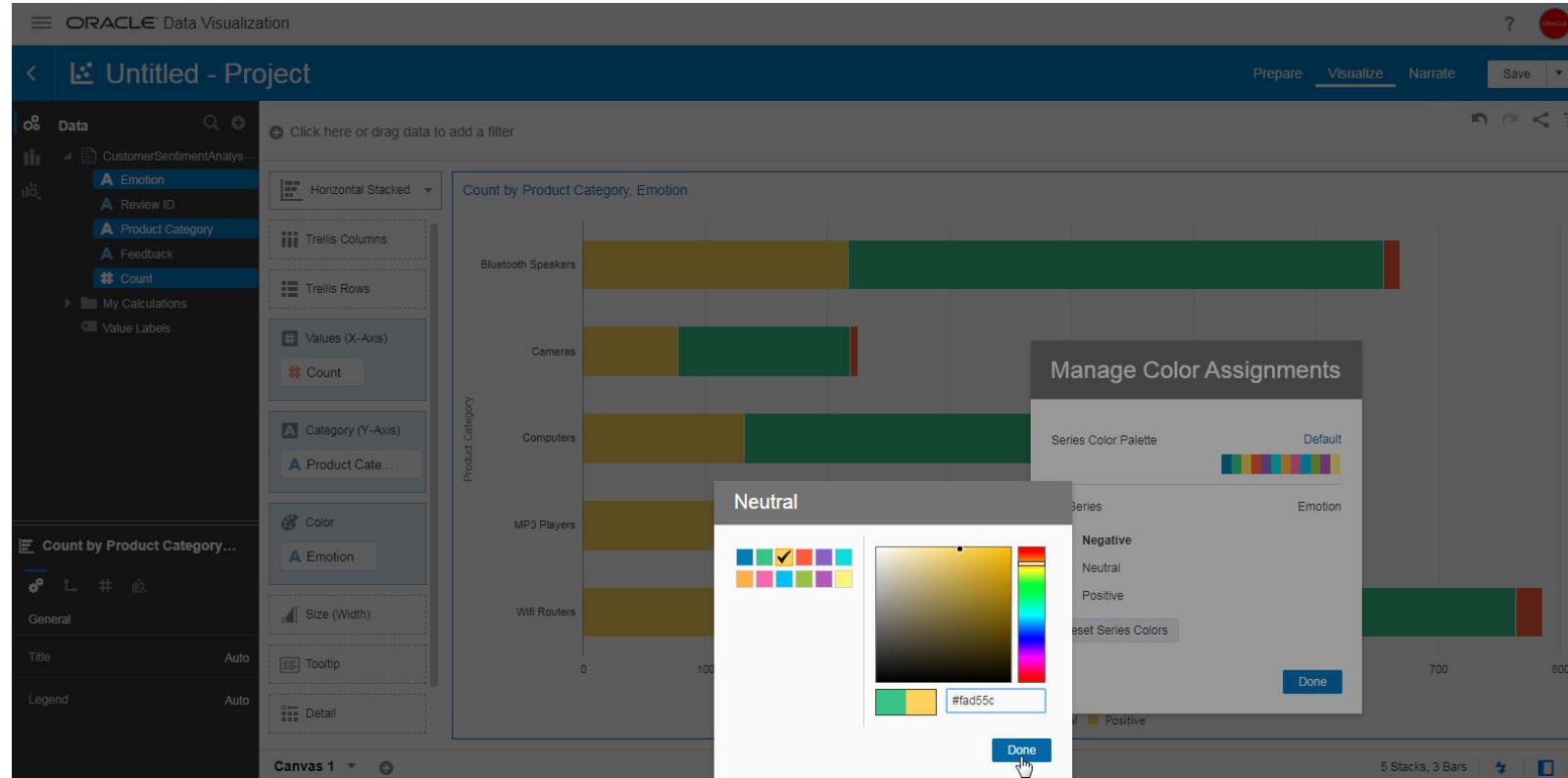
Assignment Screens: Create Sentiment Analysis with Data Flow



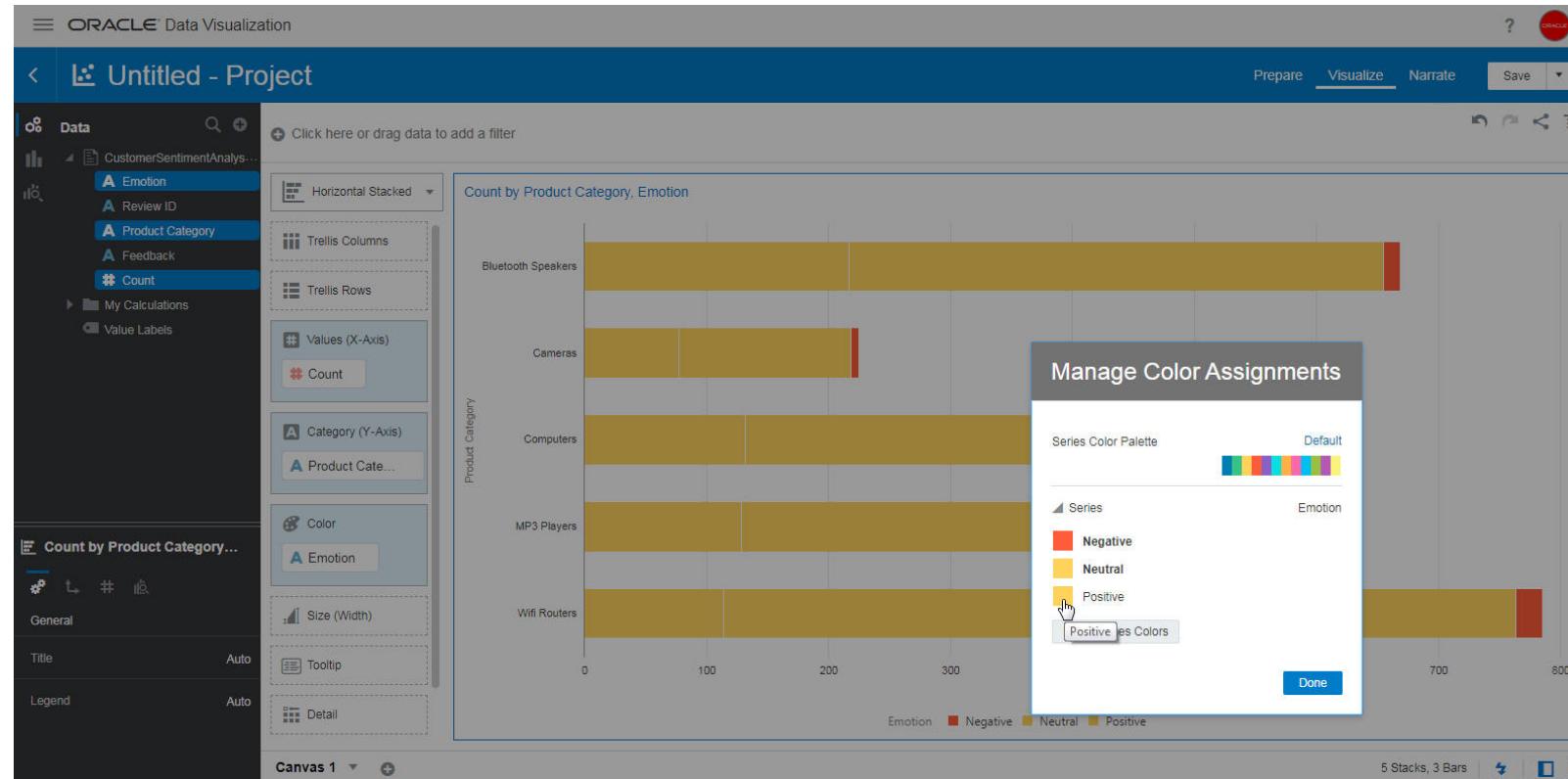
Assignment Screens: Create Sentiment Analysis with Data Flow



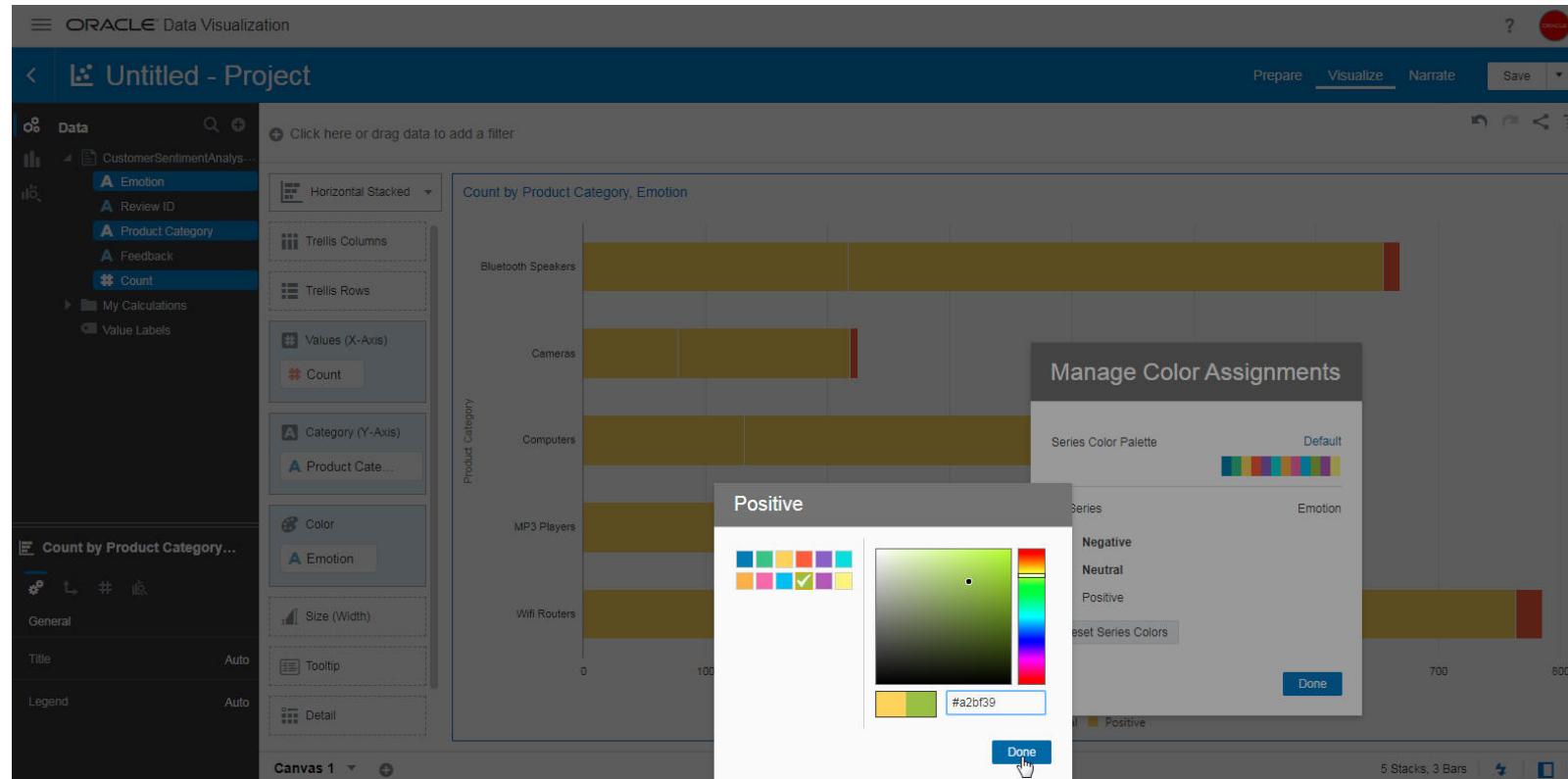
Assignment Screens: Create Sentiment Analysis with Data Flow



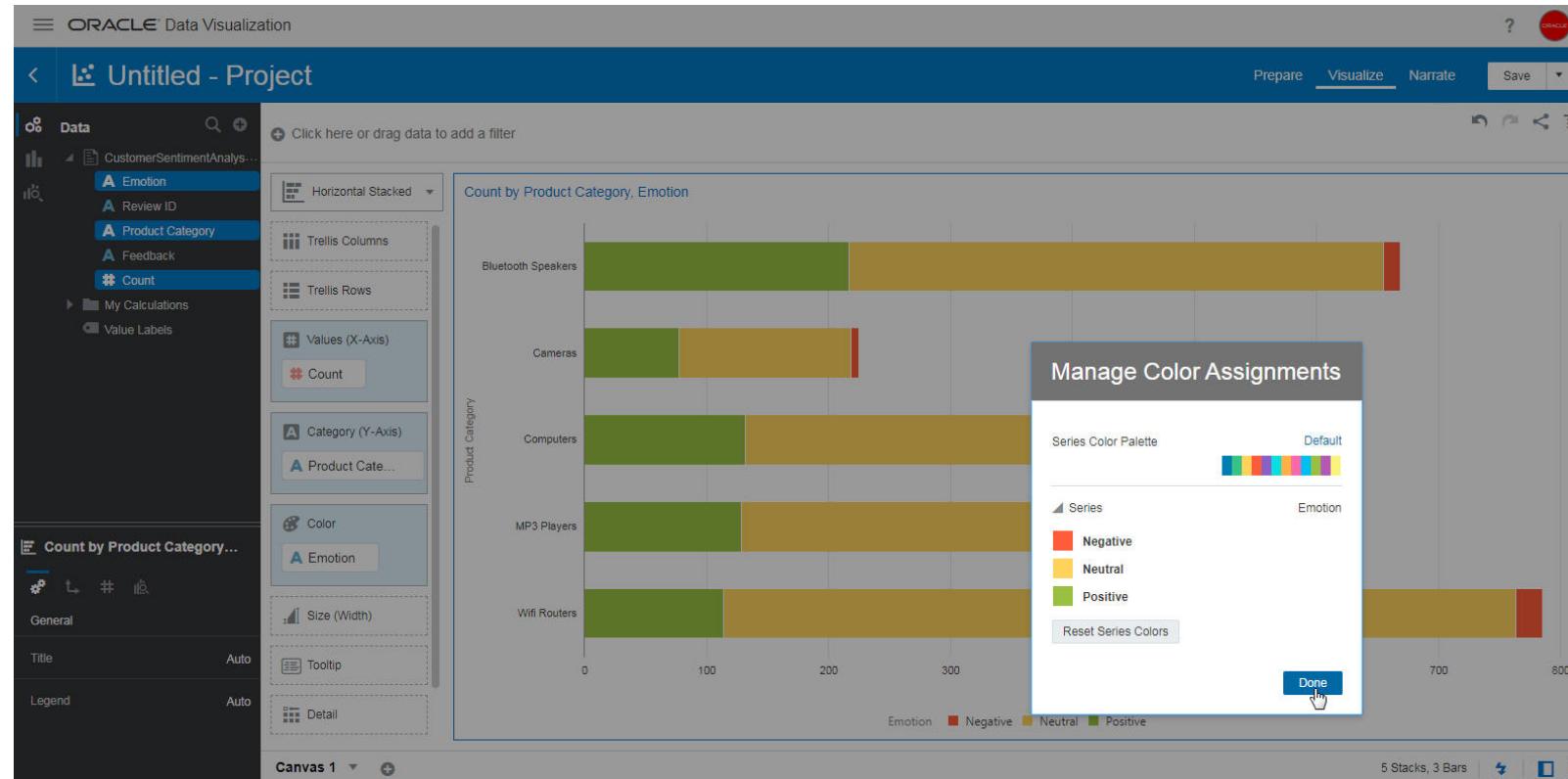
Assignment Screens: Create Sentiment Analysis with Data Flow



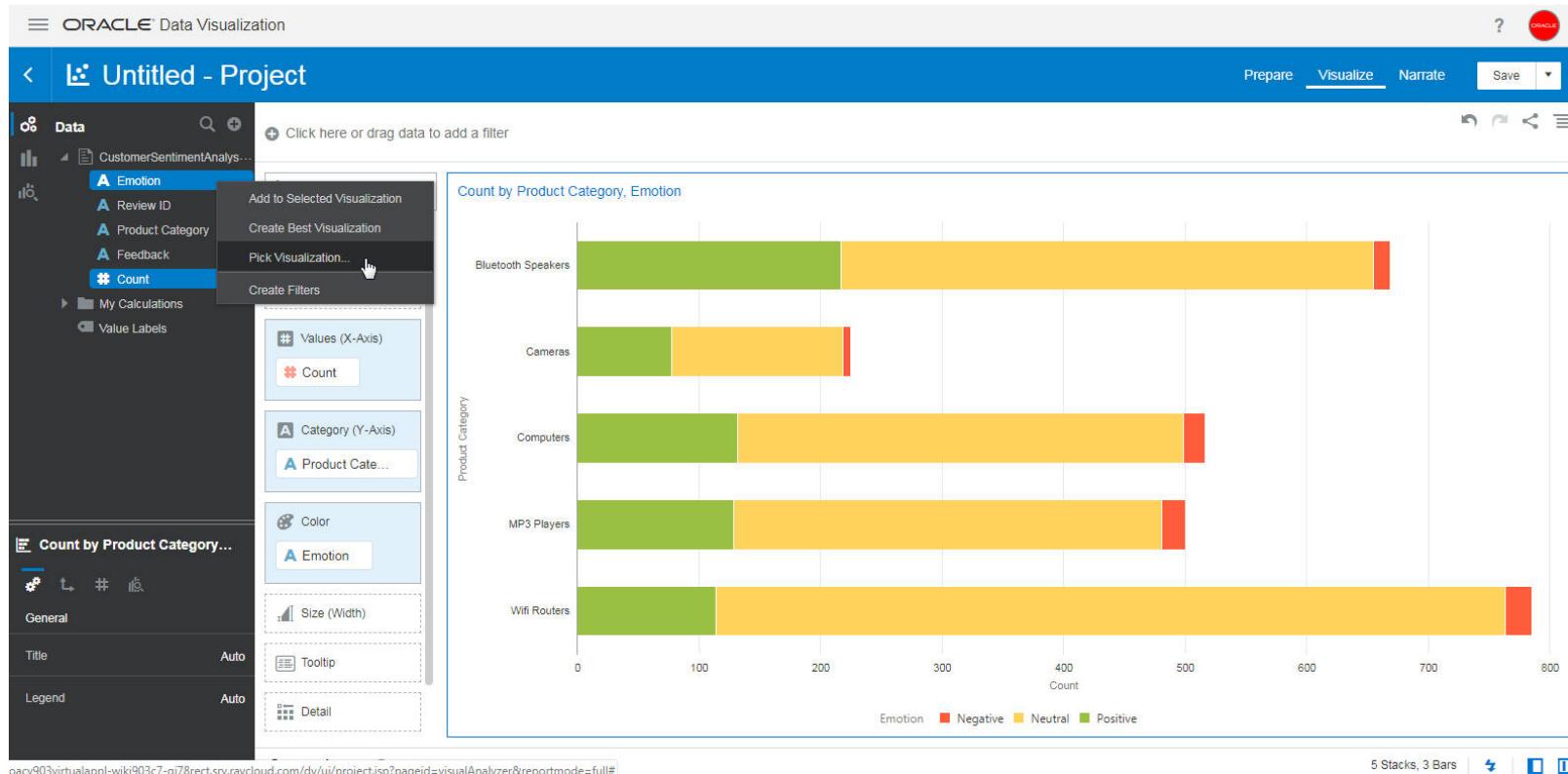
Assignment Screens: Create Sentiment Analysis with Data Flow



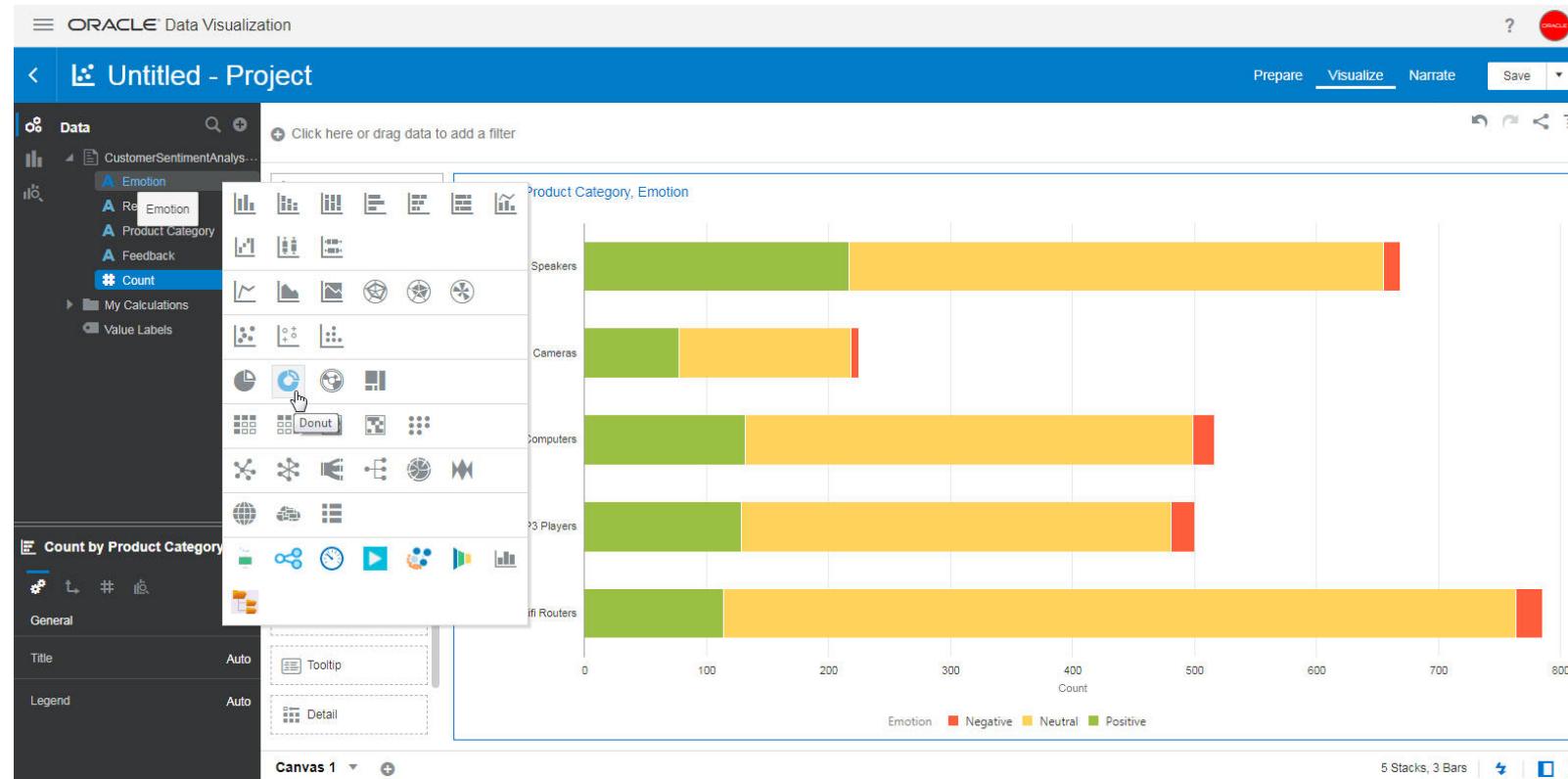
Assignment Screens: Create Sentiment Analysis with Data Flow



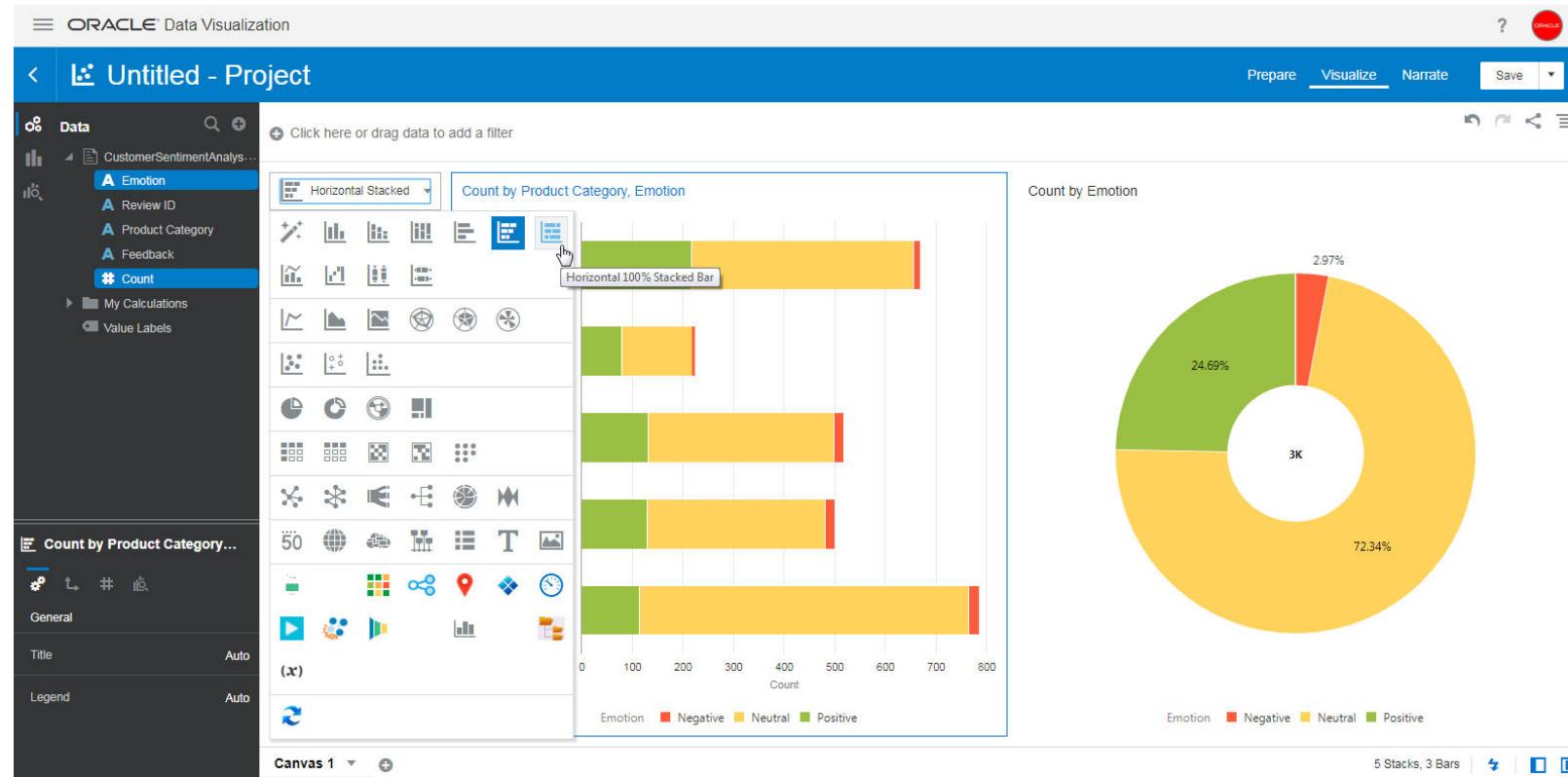
Assignment Screens: Create Sentiment Analysis with Data Flow



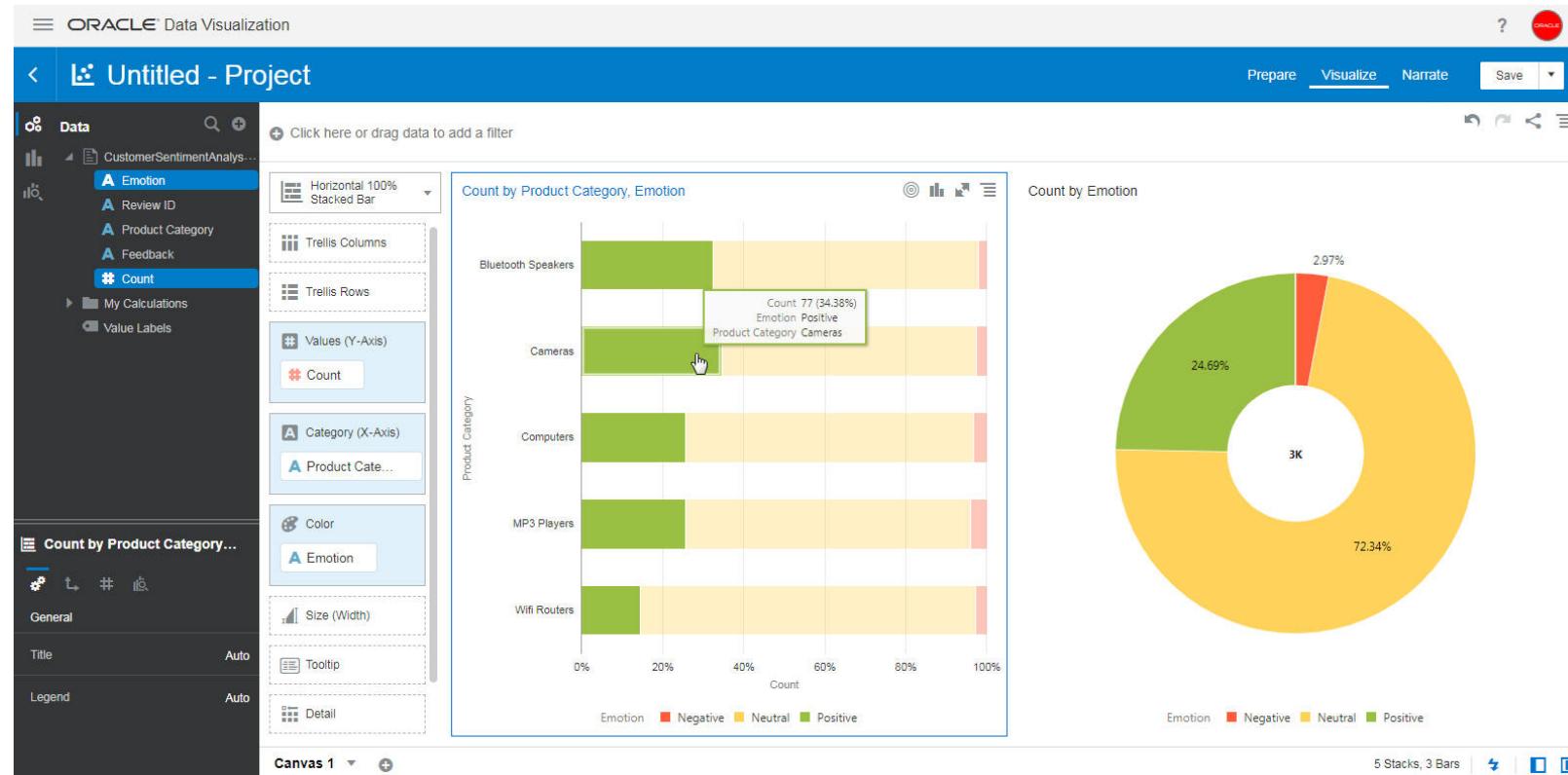
Assignment Screens: Create Sentiment Analysis with Data Flow



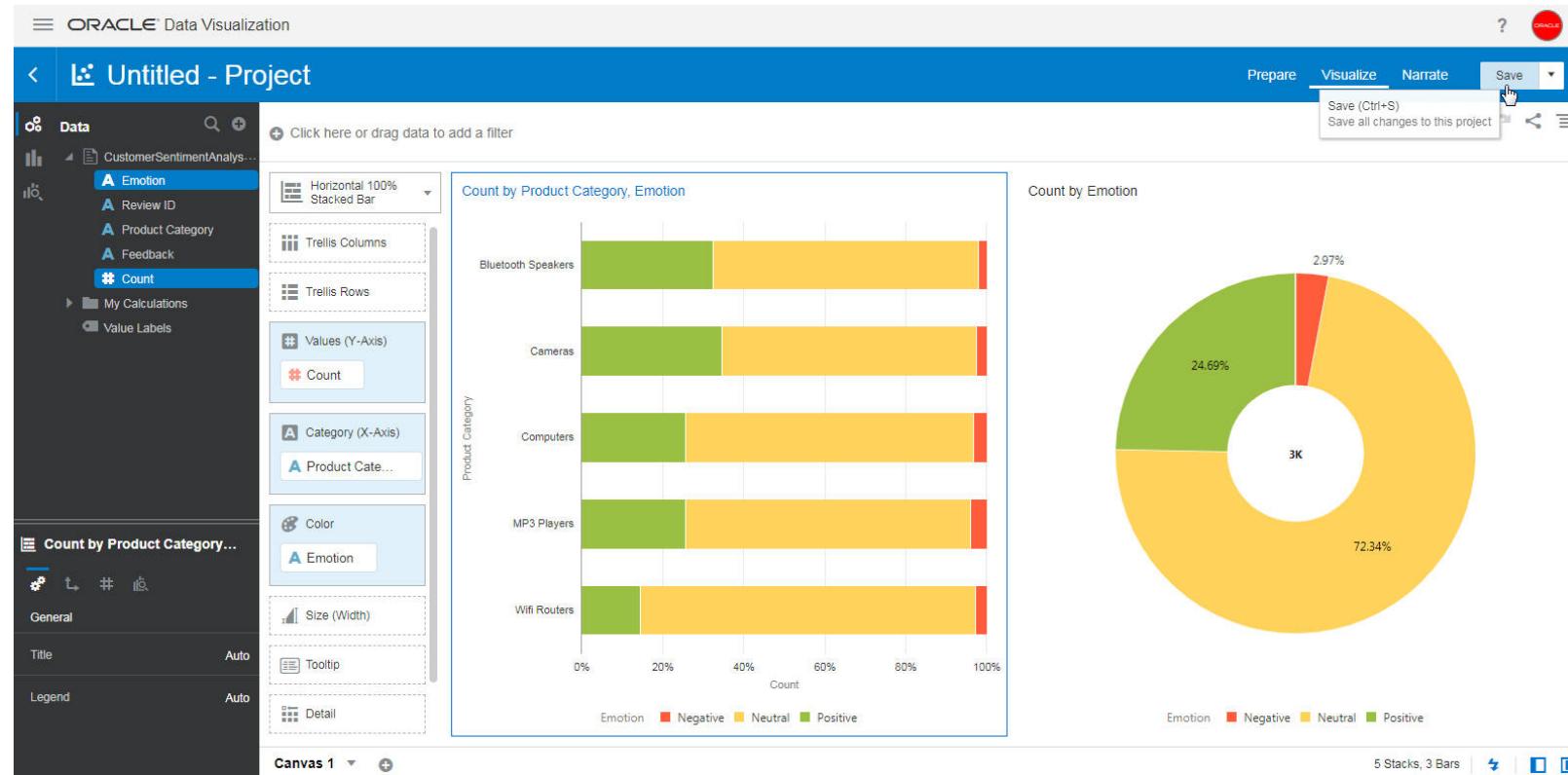
Assignment Screens: Create Sentiment Analysis with Data Flow



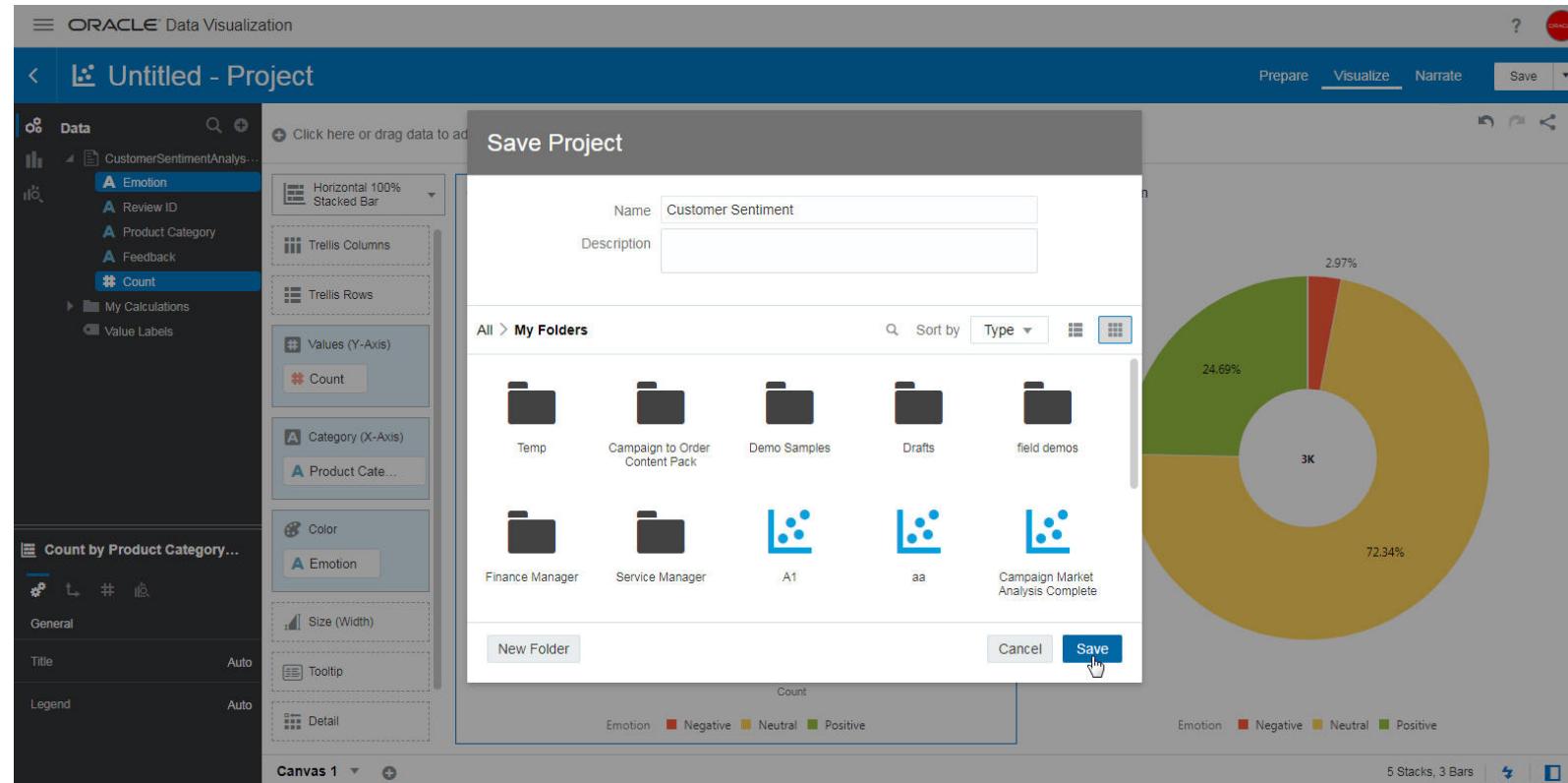
Assignment Screens: Create Sentiment Analysis with Data Flow



Assignment Screens: Create Sentiment Analysis with Data Flow



Assignment Screens: Create Sentiment Analysis with Data Flow



Bonus Projects for Practice



Section 3: Data Flow Deep Dive with Oracle Analytics

Labs

Hands on exercise

- Lab – Basics of Data Flow with DV
 - Use the data sets provided “Donation_Example.xlsx” & “Zip_Stats” and the lab guide in pdf
 - Refer to https://www.youtube.com/watch?v=YVoYznkQNmY&list=PL6gBNP-Fr8KXmHU_qvgq9EANchxvzz-zZ&index=5&t=0s
- Additional Demo
 - An additional demo showing Data Flow with Big Data Spark
 - See <https://www.youtube.com/watch?v=BMvqPmuZ8wc&list=PL6gBNP-Fr8KWJxzgqQFV1rE6UWOgmNWp-&index=19&t=0s>

Quiz



Section 3: Data Flow Deep Dive with Oracle Analytics

Q1

- Data Flow is a easy to use, user friendly tool. Which of the statement is True ?
 - Data Flow is a lightweight data transformation tool
 - Data Flow is an ETL tool available with DV
- Note: Answer have been marked in Green

Q2

- Filters in Data Flow allow restricting the number of records in the output Data Set. True or False ?
 - True
 - False
- Note: Answer have been marked in Green

Q3

- Which of the following statement is true ?
 - In OAC, both Data Flow and Sequence can be scheduled
 - In OAC only Data Flow can be scheduled, Sequences cannot be scheduled
- Note: Answer have been marked in Green

Q4

- Analysts can have only one output Data Set, per Data Flow, True or False?
 - True
 - **False**
- Note: Answer have been marked in Green

Q5

- Oracle Analytics can be leveraged for creating analysis on an Essbase cube, True OR False ?
 - True
 - False
- Note: Answer have been marked in Green