Analyze and Share Results

1. Creating Summarized Output
2. Using Prompts in Tasks and Queries
3. Customizing and Organizing Project Results

Copyright © SAS Institute Inc. All rights reserved.

1. Creating Summarized Output

1.1 Generating Summary Statistics

1.2 Creating a Summary Table Report

Copyright © SAS Institute Inc. All rights reserved.

1. Creating Summarized Output

1.1 Generating Summary Statistics

1.2 Creating a Summary Table Report

Copyright © SAS Institute Inc. All rights reserved.

Developing a Project

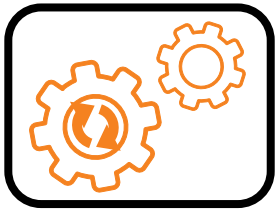
Access data

Explore data

Prepare data

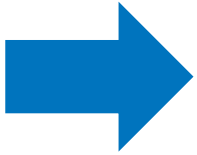
Analyze and report on data

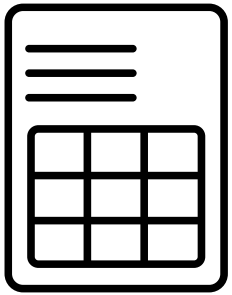
Export results



Summary Statistics

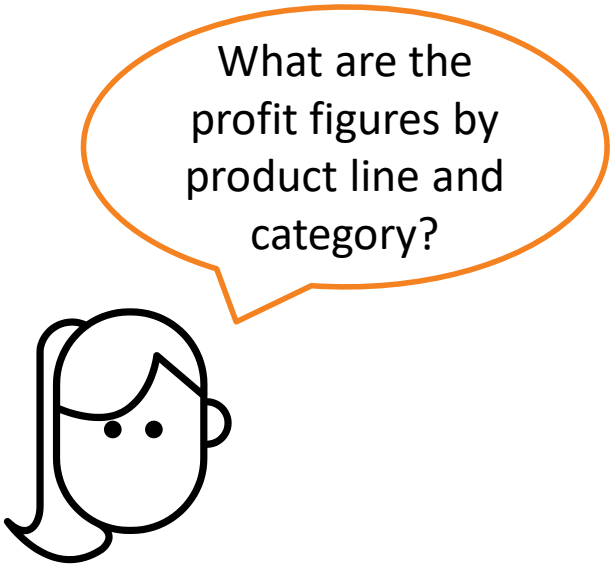
Summary Tables

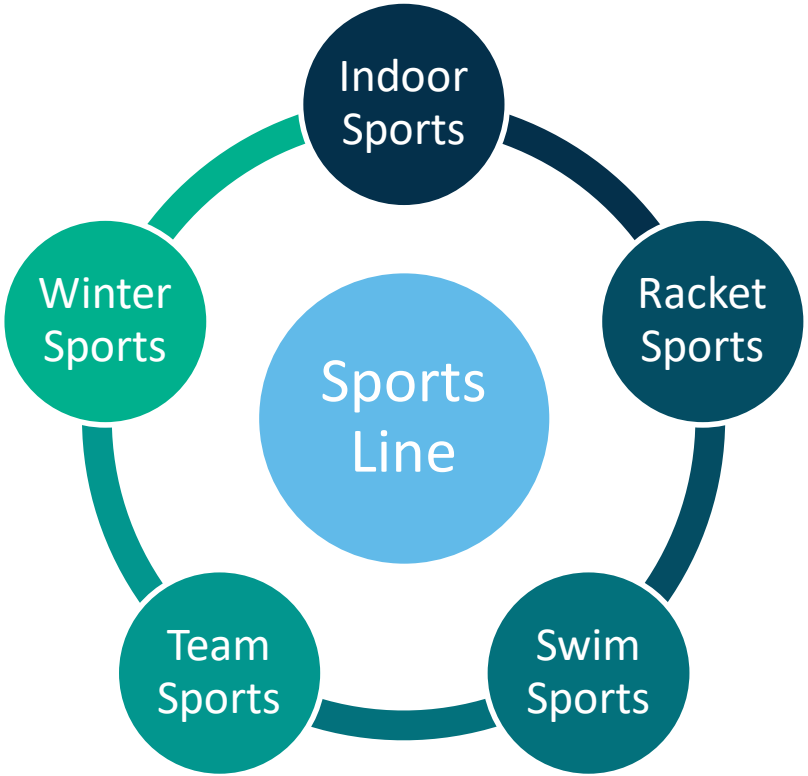




Copyright © SAS Institute Inc. All rights reserved.

Summary Statistics





Copyright © SAS Institute Inc. All rights reserved.

Demo 1: Generating Summary Statistics

This demonstration illustrates how to use the Summary Statistics Task to summarize data, store the results in a summary table, and export the table to Microsoft Excel.

Copyright © SAS Institute Inc. All rights reserved.

1. Creating Summarized Output

1.1 Generating Summary Statistics

1.2 Creating a Summary Table Report

Copyright © SAS Institute Inc. All rights reserved.

Using Summary Tables

Copyright © SAS Institute Inc. All rights reserved.

1.01 Activity

1. Select **orion_profit** dataset.
2. In the Tasks pane, expand **Describe** and double-click **Summary Tables Wizard**.
3. In Step 1, verify the data and click **Next**.
4. In Step 2, click **Add** and select **Profit**. Click **Next**.
5. In Step 3, click **Add** for the columns and select **Customer_Age_Group**. Click **Add** for the rows and select **Product_Category**. Click **Finish**.

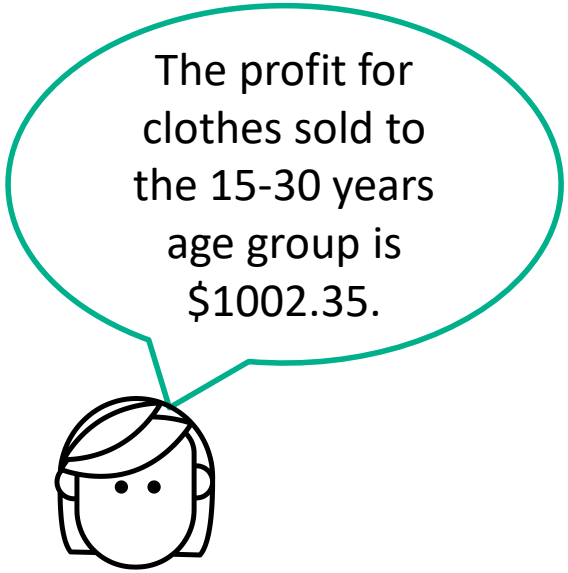
What is the profit for **clothes** sold to the **15-30 years age** group?

Copyright © SAS Institute Inc. All rights reserved.

1.01 Activity – Correct Answer

What is the profit for clothes sold to the 15-30 years age group?

	Customer Age Group				Total
	15-30 years	31-45 years	46-60 years	61-75 years	
	Profit	Profit	Profit	Profit	Profit
	Sum	Sum	Sum	Sum	Sum
Product Category					
Assorted Sports Articles	3638.00	2152.75	748.15	1008.45	7547.35
Children Sports	418.60	337.85	115.35	25.10	896.90
Clothes	1002.35	2462.84	1344.05	1077.75	5886.99
Golf	4784.03	3149.90	1026.70	762.20	9722.83
Indoor Sports	1696.90	750.20	.	965.55	3412.65
Outdoors	3385.10	6204.10	1111.10	5174.70	15875.00
Racket Sports	81.10	626.50	1016.40	346.85	2070.85
Running - Jogging	309.15	1216.35	232.20	167.85	1925.55
Shoes	578.20	566.85	963.85	890.95	2999.85
Swim Sports	19.75	48.75	162.30	.	230.80
Team Sports	405.74	191.22	211.50	279.47	1087.93
Winter Sports	318.88	586.95	1415.50	189.95	2511.28
Total	16637.80	18294.26	8347.10	10888.82	54167.98



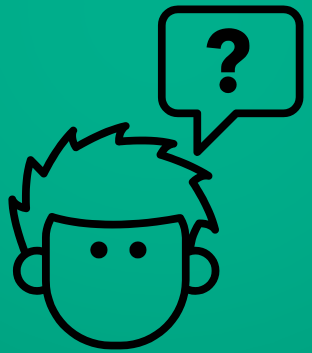
Copyright © SAS Institute Inc. All rights reserved.

Demo 2: Creating a Tabular Summary Report and Formatting

This demonstration illustrates how to use the Summary Tables task to generate descriptive statistics and display them in a tabular report.

Copyright © SAS Institute Inc. All rights reserved.

Questions?



Copyright © SAS Institute Inc. All rights reserved.

2. Using Prompts in Tasks and Queries

2.1 Prompting in Projects

2.2 Creating and Using Prompts in Tasks

2.3 Creating and Using Prompts in Queries

Copyright © SAS Institute Inc. All rights reserved.

2. Using Prompts in Tasks and Queries

2.1 Prompting in Projects

2.2 Creating and Using Prompts in Tasks

2.3 Creating and Using Prompts in Queries

Copyright © SAS Institute Inc. All rights reserved.

Developing a Project

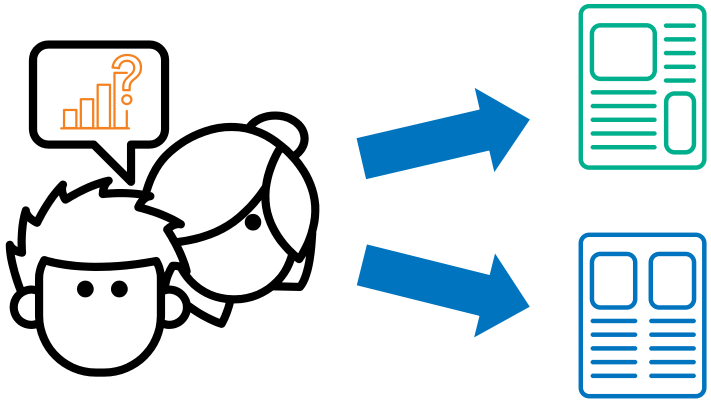
Access data

Explore data

Prepare data

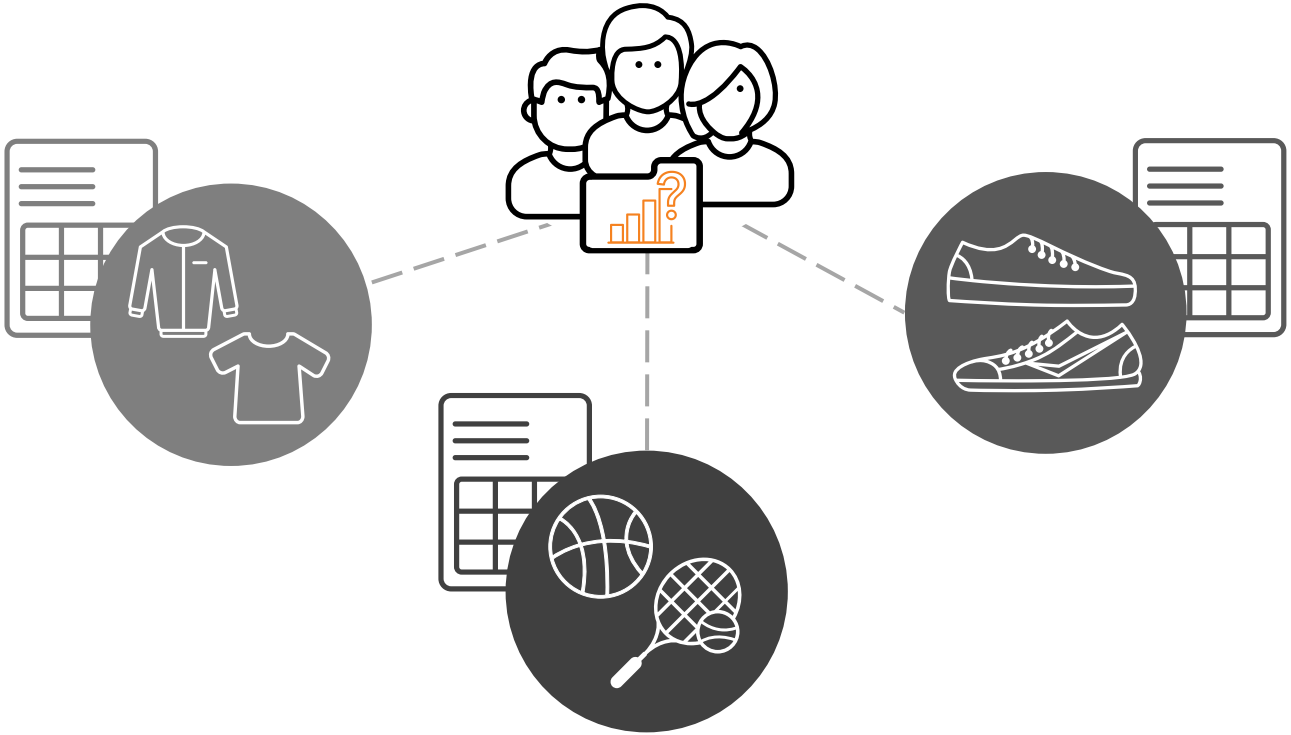
Analyze and report on data

Share results



Copyright © SAS Institute Inc. All rights reserved.

What Are Prompts?



Copyright © SAS Institute Inc. All rights reserved.

2.01 Activity

1. In the ‘Using Prompts in Tasks and Queries’ process flow, run the Select Orders Query.
2. In the Specify Values for Project Prompts window, do the following:
   - From the customer age group menu, select **31-45 years**.
   - In the **Include orders with profits exceeding** field, enter **100**.
4. Click **Run**.
5. In the Project pane or process flow, double-click **Select Orders Query** to view the results.

How many rows were returned in the query result?

Copyright © SAS Institute Inc. All rights reserved.

Multiple Choice Question

How many rows were returned in the query result?

a. 0
b. 58
c. 76
d. 617

Copyright © SAS Institute Inc. All rights reserved.

Multiple Choice Question – Correct Answer

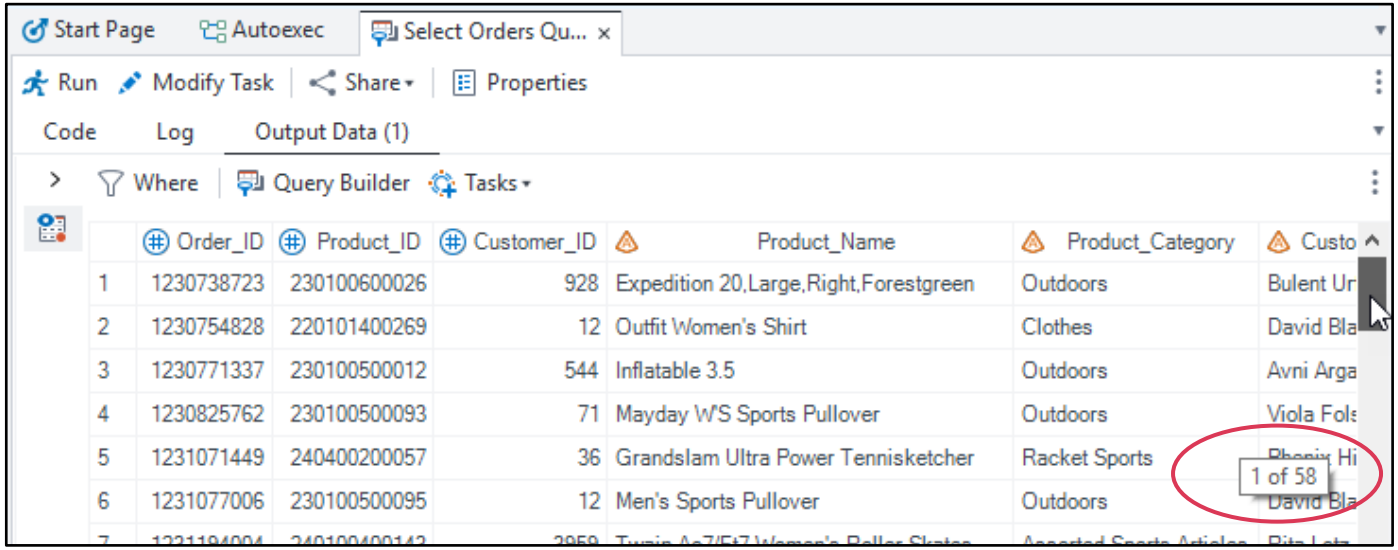
How many rows were returned in the query result?

a. 0

b. 58

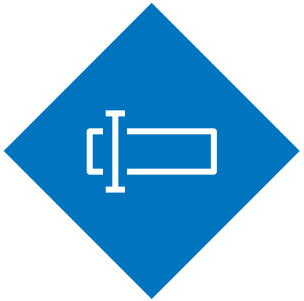
c. 76

d. 617



Copyright © SAS Institute Inc. All rights reserved.

Creating Prompts



Prompt Manager

Query Builder

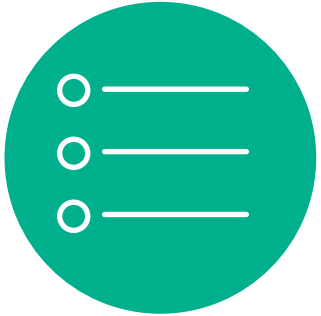
SAS Program

Copyright © SAS Institute Inc. All rights reserved.

Selected Prompt Types

Text or Numeric

Date Values



Variable Lists

Color Selection

Copyright © SAS Institute Inc. All rights reserved.

2. Using Prompts in Tasks and Queries

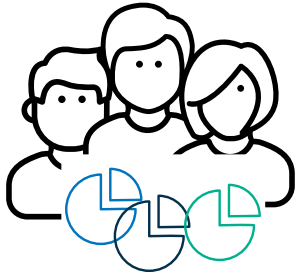
2.1 Prompting in Projects

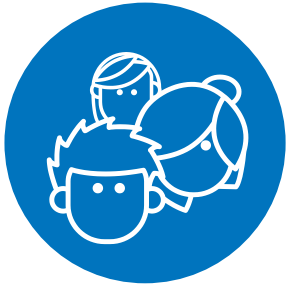
2.2 Creating and Using Prompts in Tasks

2.3 Creating and Using Prompts in Queries

Copyright © SAS Institute Inc. All rights reserved.

Prompting in Tasks





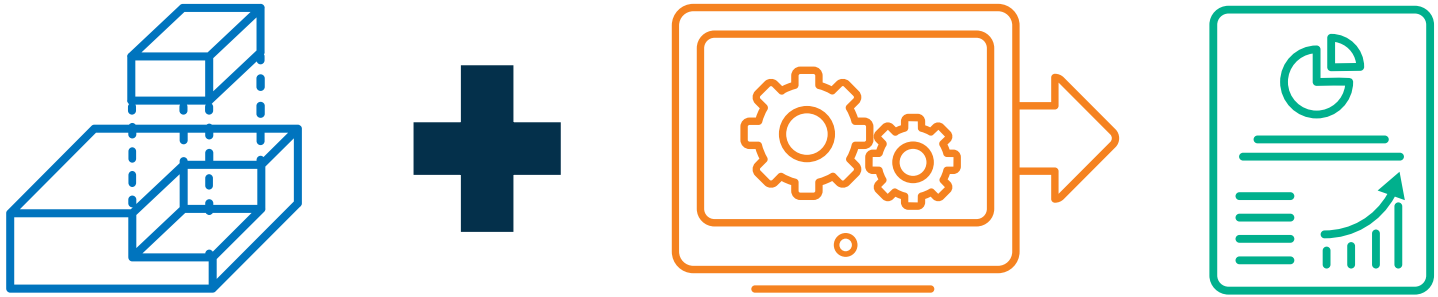
Profit by customer age group

Profit by
product category

Profit by country

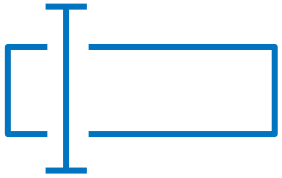
Copyright © SAS Institute Inc. All rights reserved.

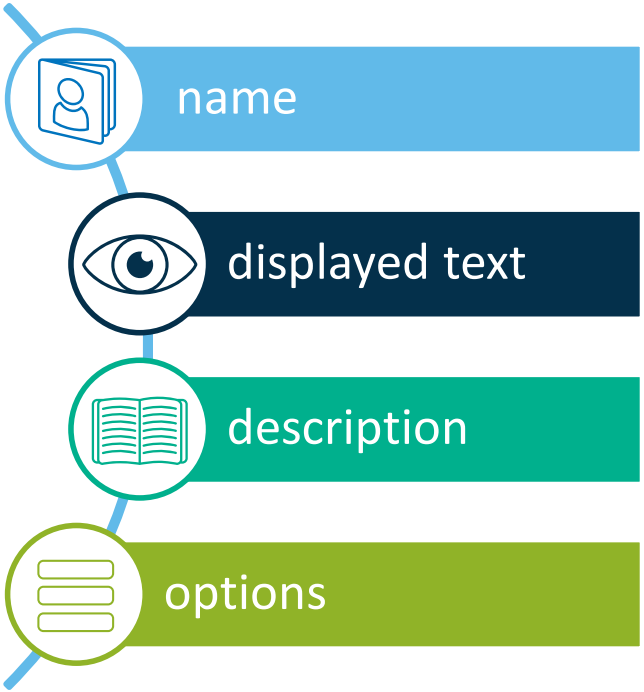
Working with Prompts in Tasks



Copyright © SAS Institute Inc. All rights reserved.

General Prompt Properties





Copyright © SAS Institute Inc. All rights reserved.

6.02 Multiple Answer Question

Which of the following are valid names for prompts? (Select all that apply.)

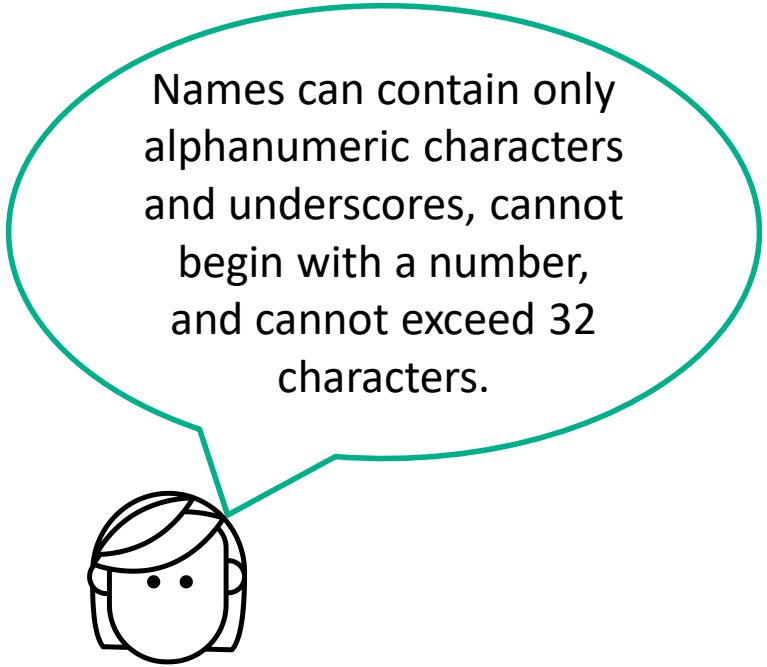
a. Select Country
b. Select_a_Category
c. Profit$Segments
d. 1stQtrValues
e. Qtr1Values

Copyright © SAS Institute Inc. All rights reserved.

6.02 Multiple Answer Question – Correct Answers

Which of the following are valid names for prompts? (Select all that apply.)

a. Select Country
b. Select_a_Category
c. Profit$Segments
d. 1stQtrValues
e. Qtr1Values



Copyright © SAS Institute Inc. All rights reserved.

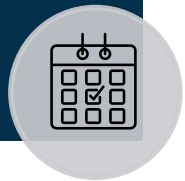
Prompt Type and Value Properties

- Default value
- Select the method for populating prompt
- Single or multiple values

Text

- Default value
- Select the method for populating prompt
- Single or multiple values
- Date type

Date



- Default value
- User selects values from a static list
- Single value

Variable

Copyright © SAS Institute Inc. All rights reserved.

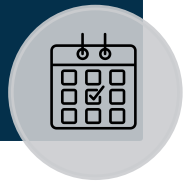
Prompt Type and Value Properties

- Default value
- Select the method for populating prompt
- Single or multiple values

Text

- Default value
- Select the method for populating prompt
- Single or multiple values
- Date type

Date



- Default value
- User selects values from a static list
- Single value

Variable

Copyright © SAS Institute Inc. All rights reserved.

Demo 3: Prompting in Tasks

This demonstration illustrates how to create a variable prompt for use in a task.

Copyright © SAS Institute Inc. All rights reserved.

Lesson 6: Using Prompts in Tasks and Queries

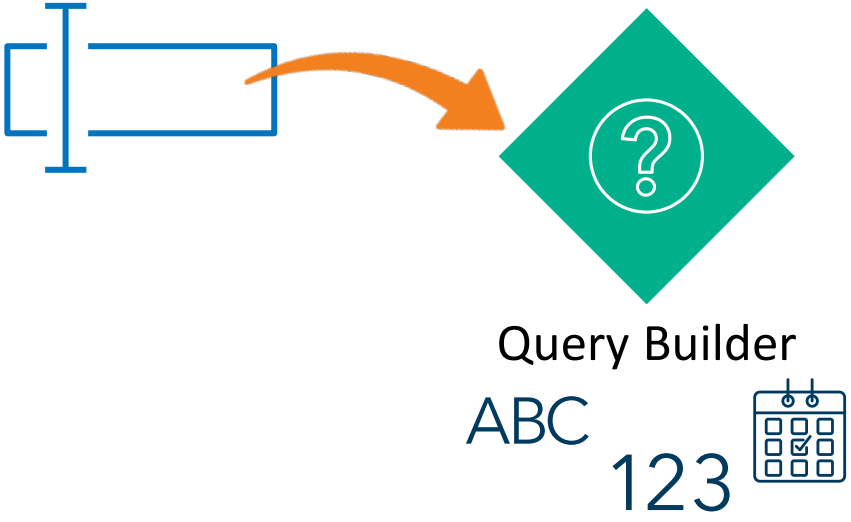
6.1 Prompting in Projects

6.2 Creating and Using Prompts in Tasks

6.3 Creating and Using Prompts in Queries

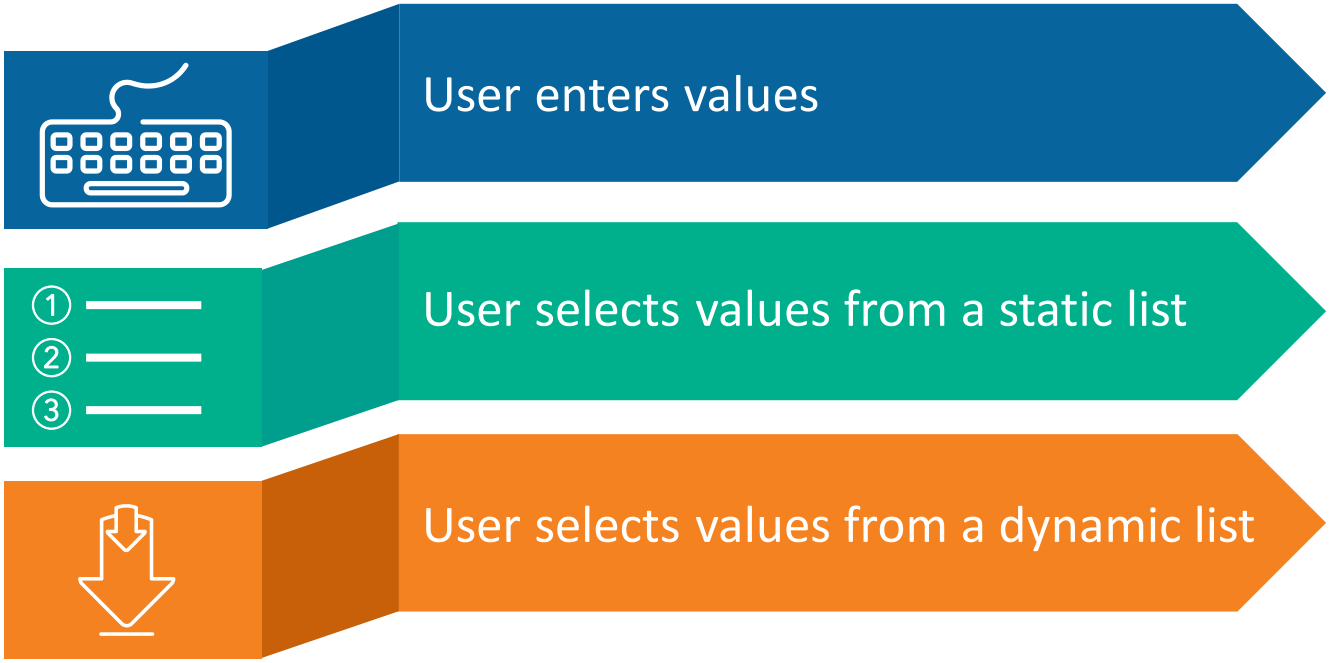
Copyright © SAS Institute Inc. All rights reserved.

Working with Prompts in the Query Builder



Copyright © SAS Institute Inc. All rights reserved.

Methods for Populating Prompts



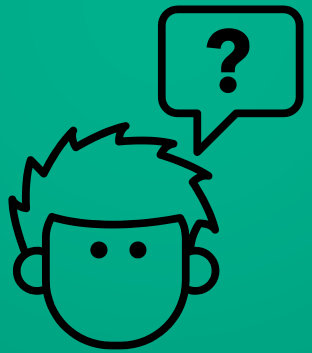
Copyright © SAS Institute Inc. All rights reserved.

Demo 4: Prompting in Queries

This demonstration illustrates how to create a prompt for use in a query.

Copyright © SAS Institute Inc. All rights reserved.

Questions?



Copyright © SAS Institute Inc. All rights reserved.

3. Customizing and Organizing Project Results

3.1 Combining Results

3.2 Updating and Organizing Projects

Copyright © SAS Institute Inc. All rights reserved.

3. Customizing and Organizing Project Results

3.1 Combining Results

3.2 Updating and Organizing Projects

Copyright © SAS Institute Inc. All rights reserved.

Developing a Project

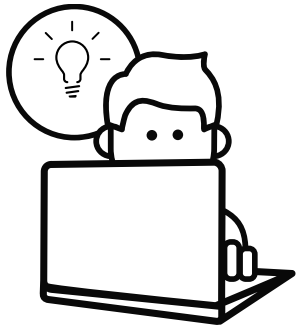
Access data

Explore data

Prepare data

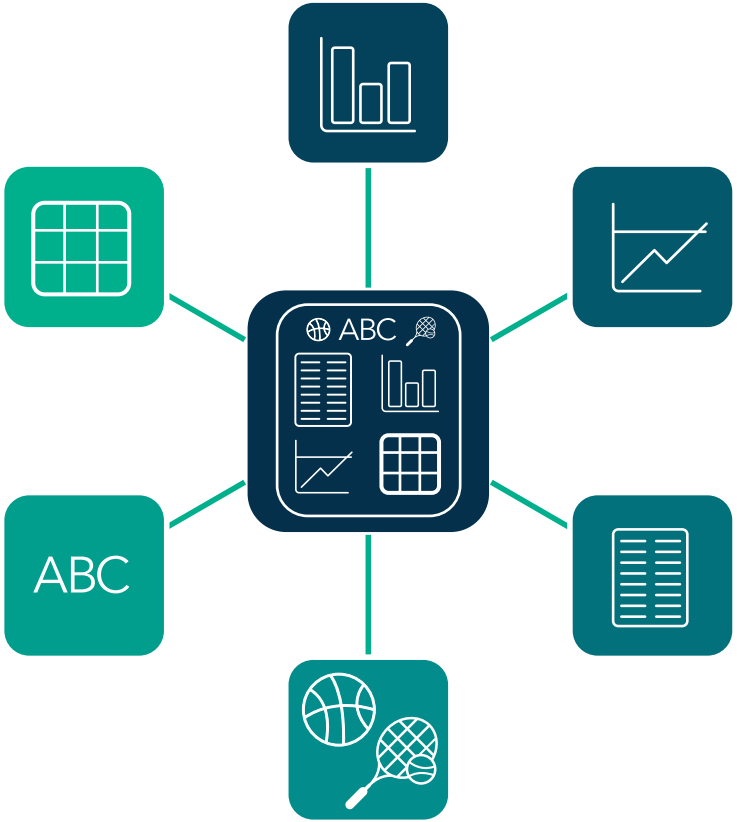
Analyze and report on data

Share results



Copyright © SAS Institute Inc. All rights reserved.

SAS Reports



Copyright © SAS Institute Inc. All rights reserved.

3.01 Activity

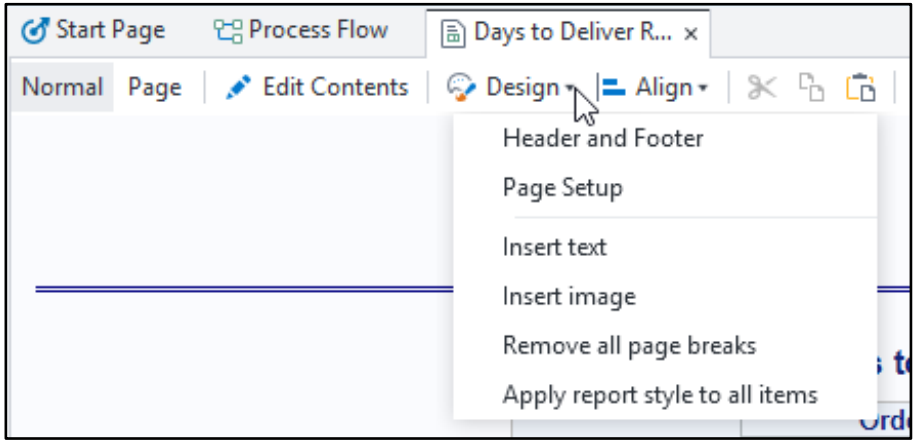
1. Open **Activity 3.1** process flow, **Run** from **Create Format ($CntryFmt - Local) Task**.
2. Double-click **Days to Deliver Report** in the project.
3. Click **Design** on the report toolbar.

Which actions can you perform?

Copyright © SAS Institute Inc. All rights reserved.

3.01 Activity – Correct Answer

Which actions can you perform?



Copyright © SAS Institute Inc. All rights reserved.

Demo 5: Combining Results

This demonstration illustrates how to create a report by combining task results into a single file.

Copyright © SAS Institute Inc. All rights reserved.

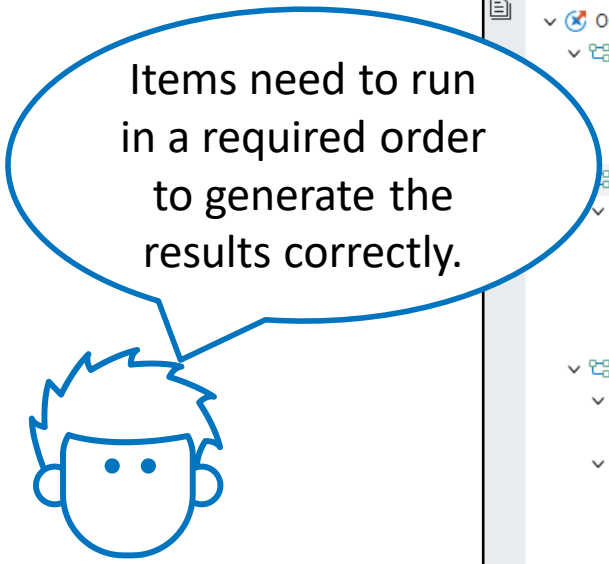
3. Customizing and Organizing Project Results

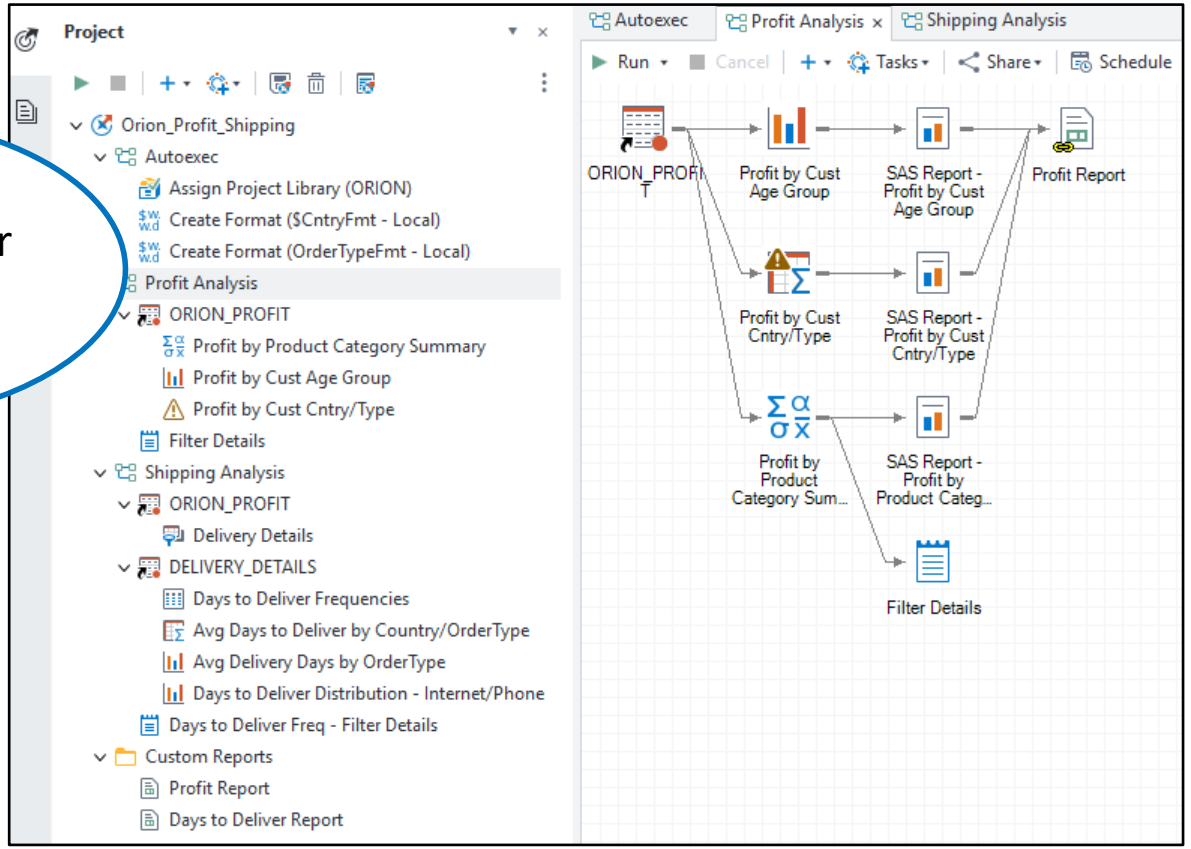
7.1 Combining Results

7.2 Updating and Organizing Projects

Copyright © SAS Institute Inc. All rights reserved.

Project Organization

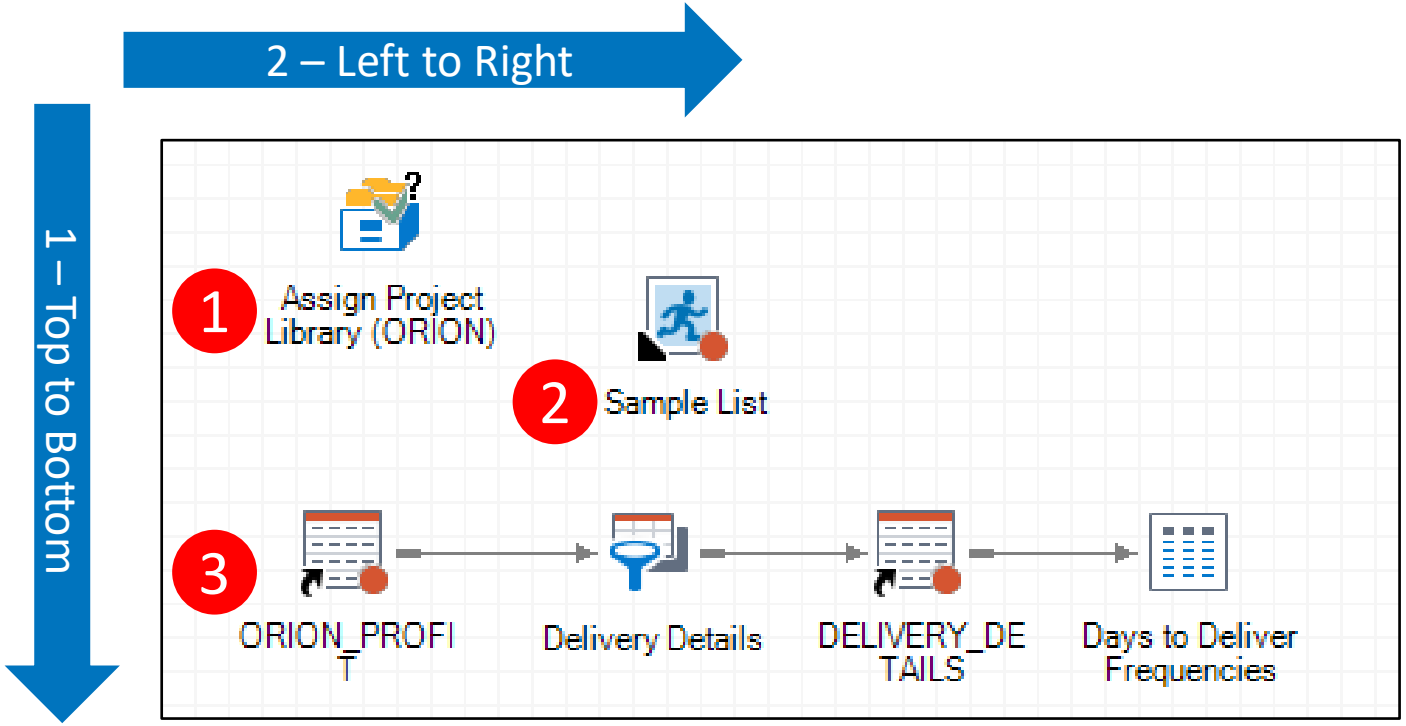




Copyright © SAS Institute Inc. All rights reserved.

Orion_Profit_Shipping.egp

Process Flow Execution



Copyright © SAS Institute Inc. All rights reserved.

Execution_Order.egp

3.02 Activity

1. Click **Run** in the Activity 3.2 process flow toolbar. Enter the course data location when prompted and click **Run**.
2. Notice that the process flow failed to generate the results.
3. Double-click the **Order Detail Query** object to view the log.

Why did the **Order Detail Query** object fail to execute?

Copyright © SAS Institute Inc. All rights reserved.

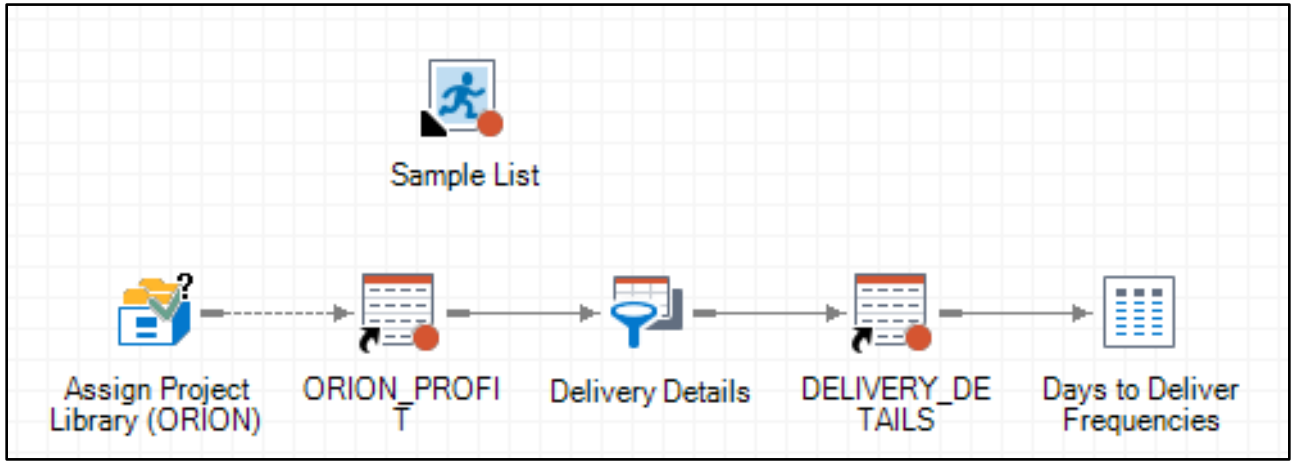
3.02 Activity – Correct Answer

Why did the **Order Detail Query** object fail to execute?

```
1          ;*';*";*/;quit;run;
2          OPTIONS PAGENO=MIN;
3          %put ERROR: Unable to get SAS code. The library "ORDATA" on server "Local" was not found.;
ERROR: Unable to get SAS code. The library "ORDATA" on server "Local" was not found.
4
5          QUIT; RUN;
6
```

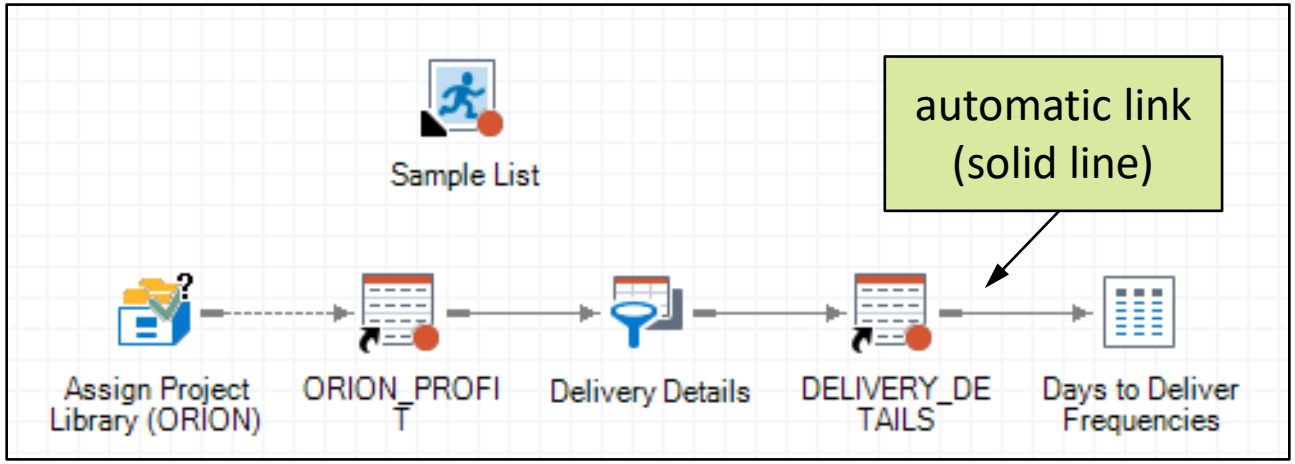
Copyright © SAS Institute Inc. All rights reserved.

Task Links



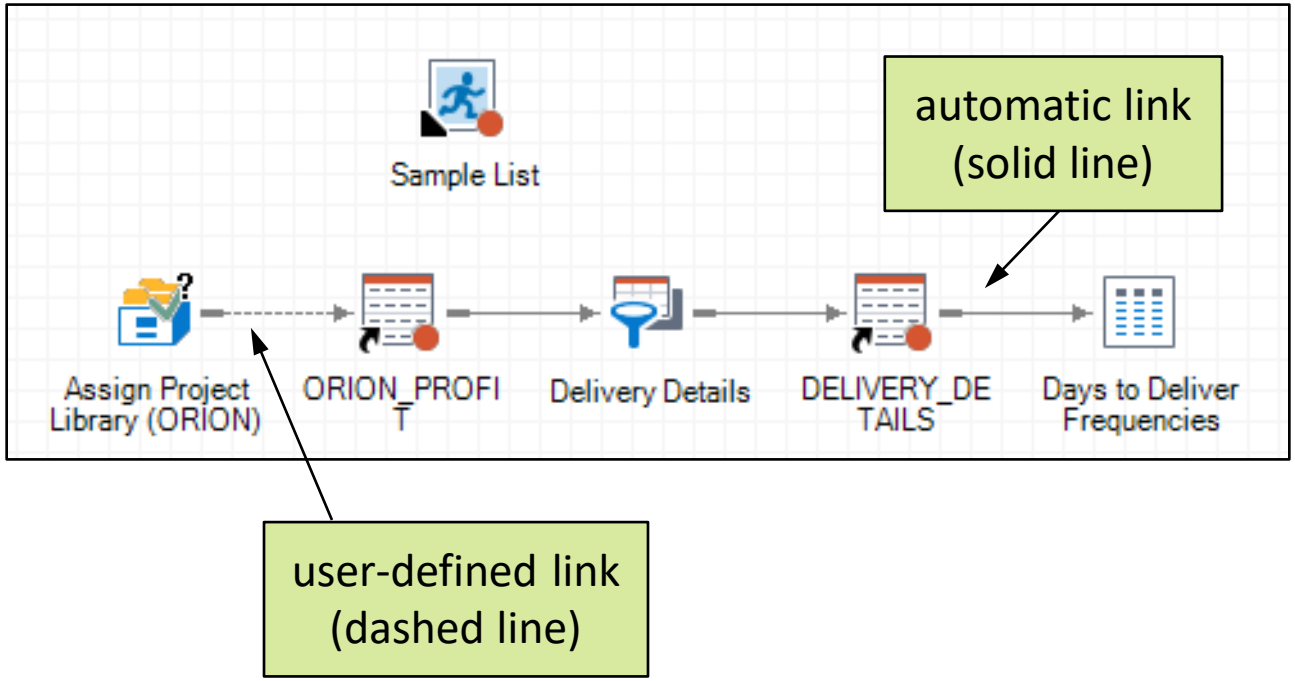
Copyright © SAS Institute Inc. All rights reserved.

Task Links



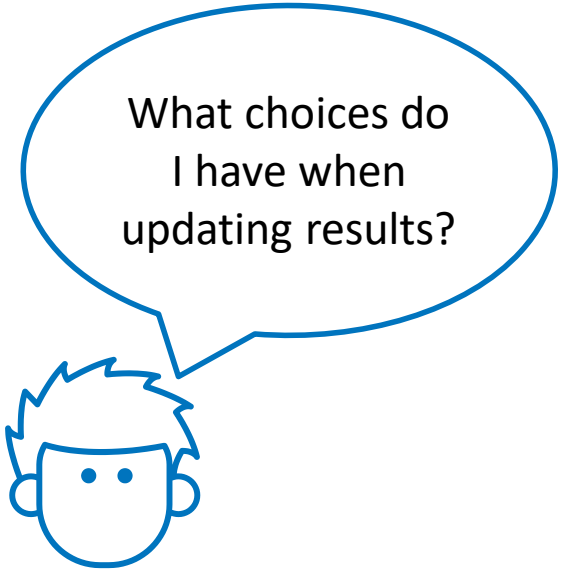
Copyright © SAS Institute Inc. All rights reserved.

Task Links



Copyright © SAS Institute Inc. All rights reserved.

Updating Results



- Run selected items
- Run process flow
- Run to selected item
- Run from selected item

Copyright © SAS Institute Inc. All rights reserved.

3.2 Activity (Cont'd)

1. To remove the existing **ORION** library assignment, in the Servers pane, right-click ***your-server-name*** and select **Disconnect**. Then right-click ***your-server-name*** and select **Connect**.
2. On the Process Flow tab, drag **Assign Project Library** to the top of the process flow.
3. Right-click the **Assign Project Library** object and select **Link to**.
4. In the Link window, select **CUSTOMERS** and click **OK**.
5. Click **Run**. Enter the course data location when prompted and click **Run**.

Is the Profit by Product Category Summary report generated?

Copyright © SAS Institute Inc. All rights reserved.

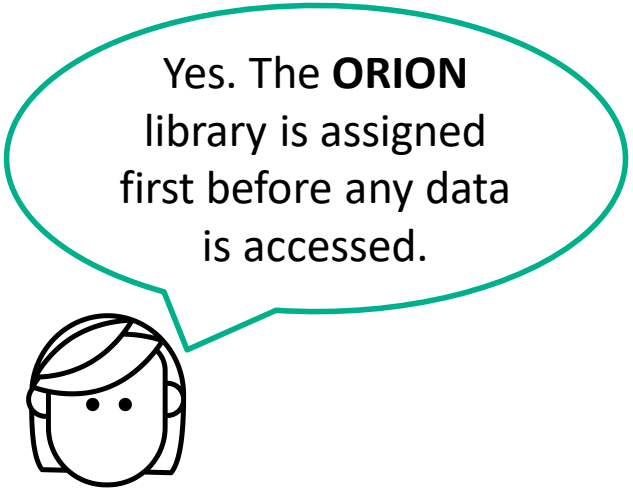
3.2 Activity – Correct Answer

Is the Profit by Product Category Summary report generated?

Profit Summary for Product Categories
North American Region

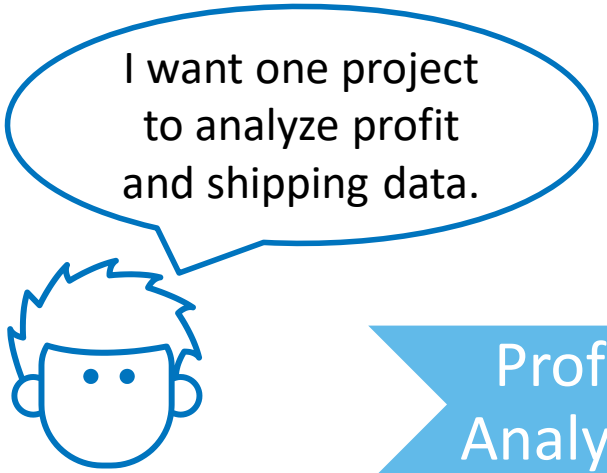
The MEANS Procedure

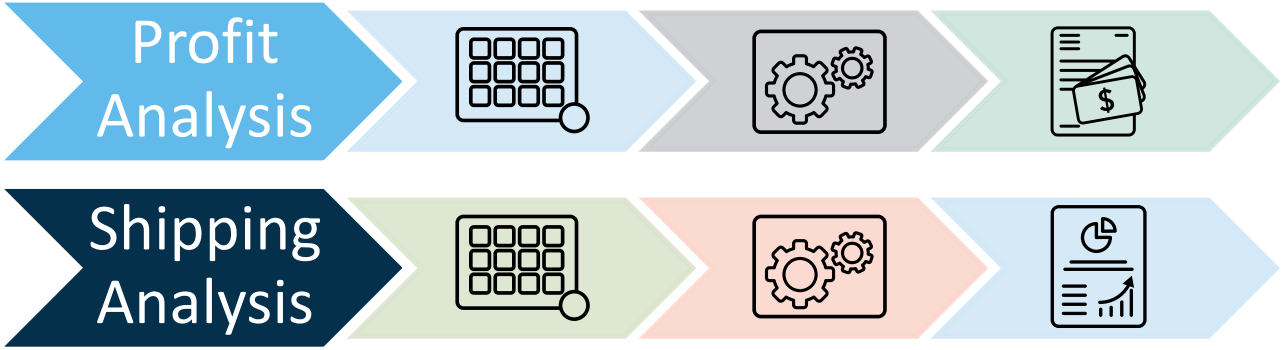
Analysis Variable : Profit						
Product_Line	Product_Category	N Obs	Mean	Sum	N	Median
Children	Children Sports	22	27.45	603.95	22	23.00
Clothes & Shoes	Clothes	67	43.86	2938.55	67	30.95
	Shoes	26	69.82	1815.30	26	66.48
Outdoors	Outdoors	61	91.74	5596.40	61	54.75
Sports	Assorted Sports Articles	29	104.27	3023.75	29	92.15
	Golf	63	140.20	8832.53	63	85.95
	Indoor Sports	8	220.02	1760.15	8	62.70
	Racket Sports	5	217.76	1088.80	5	31.70
	Running - Jogging	26	57.52	1495.60	26	44.05
	Swim Sports	4	28.73	114.90	4	28.08
	Team Sports	32	30.34	970.93	32	28.29
	Winter Sports	17	147.72	2511.28	17	102.05



Copyright © SAS Institute Inc. All rights reserved.

Multiple Process Flows





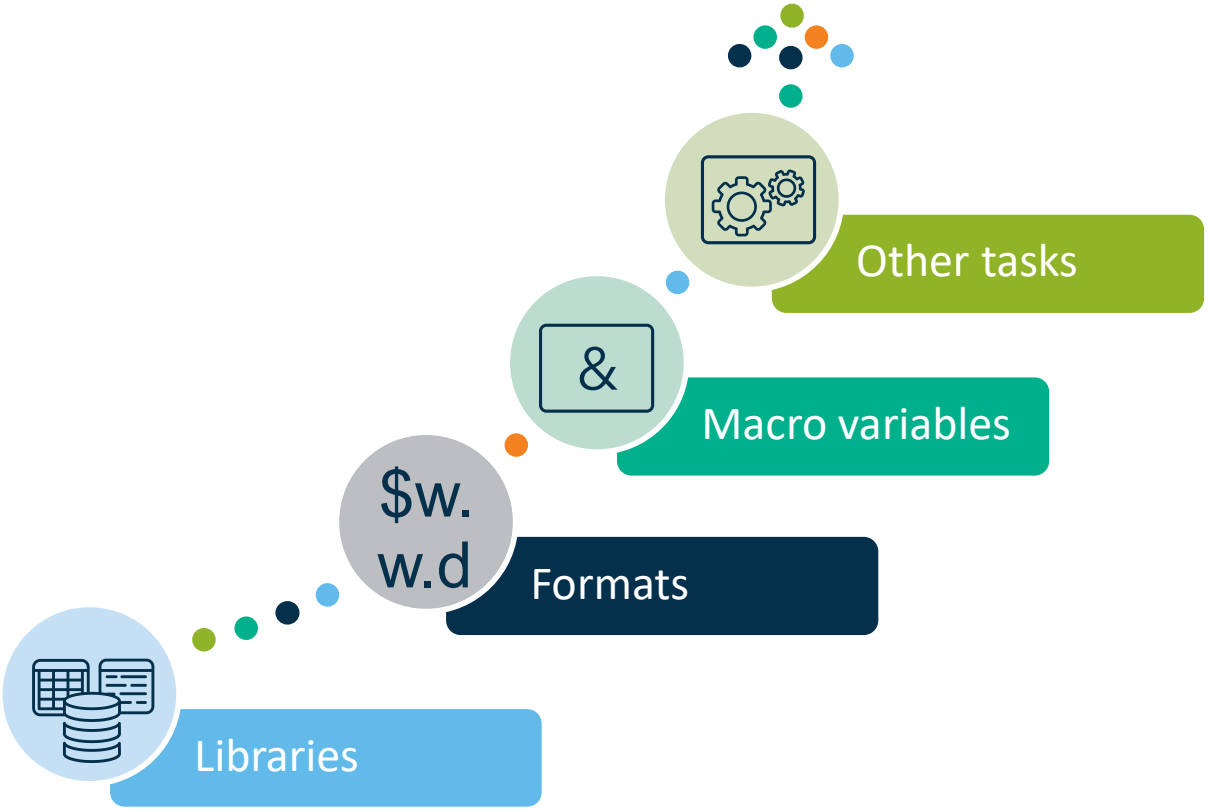
Copyright © SAS Institute Inc. All rights reserved.

Demo 6: Using Multiple Process Flows

This demonstration illustrates how to move objects between multiple process flows.

Copyright © SAS Institute Inc. All rights reserved.

Autoexec Process Flow



Copyright © SAS Institute Inc. All rights reserved.

3.3 Activity

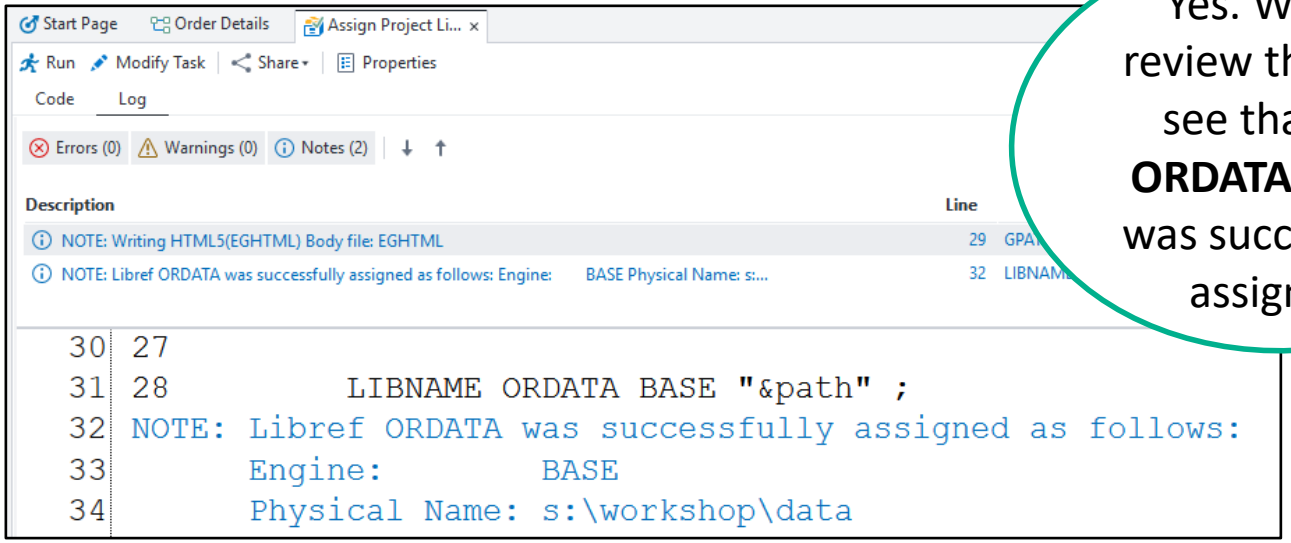
1. Create a new process flow and rename it **Autoexec**.
2. Using the Project pane, right-click the **Assign Project Library** object and select **Move to** ⇨ **Autoexec**.
3. Save the project and then close it.
4. Reopen the project. Click **Run** to run the Autoexec process flow.
5. Enter the course data location when prompted and click **Run**.

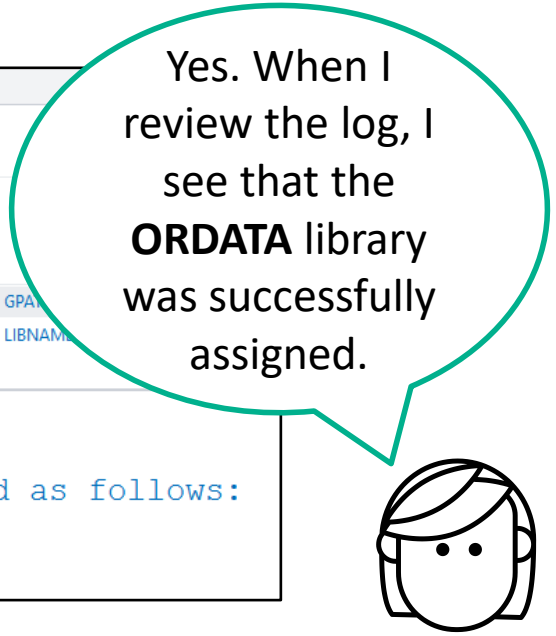
Was the **ORION** library successfully assigned?

Copyright © SAS Institute Inc. All rights reserved.

3.3 Activity – Correct Answer

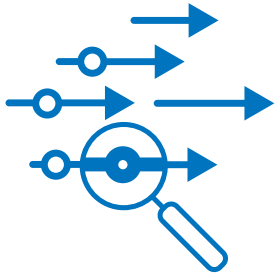
Was the **ORION** library successfully assigned?

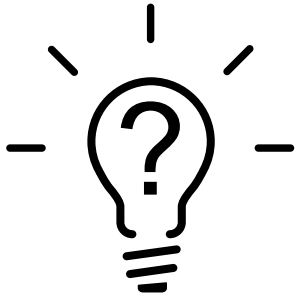


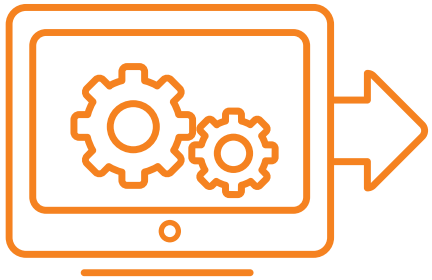


Copyright © SAS Institute Inc. All rights reserved.

Scheduling Updates







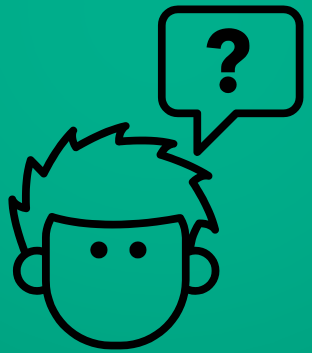
Copyright © SAS Institute Inc. All rights reserved.

Project Organization Recommendations

- Use descriptive names
- Document details
- Arrange objects
- Use background colors

Copyright © SAS Institute Inc. All rights reserved.

Questions?



Copyright © SAS Institute Inc. All rights reserved.

Practice Exercise 9

This exercise reinforces the concepts discussed previously.

Copyright © SAS Institute Inc. All rights reserved.