Expressions: Transform Your Data

Exercise to Accompany
Appian Functions

Lesson 4 Exercise

Introduction

This exercise offers you the opportunity to practice the skills you just learned in the previous lesson.

Exercise Environment

Complete the exercises in this course using an Appian Community Edition environment. You should have obtained one earlier to complete exercises in the previous courses in this learning path. If you do not have an Appican Community Edition environment, get started by visiting: https://community.appian.com/p/my-learning-journey.

In this exercise, you will practice writing expression rules, and save them in a practice folder created in the AX application. These are practice exercises that are separate from the remainder of your AX application. If you are working on these exercises independently and do not have the AX application, create an application first before proceeding. Review the Create an Application: First Steps course for instructions on creating an application.

Save Often

Appian does not automatically save updates, so save your objects frequently.

Additional Resources

Appian provides a plethora of training resources for novice Appian developers. The following resources are particularly popular with our learners:

- Academy Online - Appian's online courses provide useful survey courses, step-by-step tutorials, and some additional practice exercises. Explore these resources at your own pace. Survey courses will help you with developing a better grasp of the range of topics you need to learn about. Video and print tutorials will help you with getting hands-on experience with Appian.
- Appian Documentation - Appian's product documentation will provide you with the overview of key Appian features, newest release information, additional tutorials, and helpful patterns and recipes to implement in your app.
- Community Discussions for New Users - Join our community of experts to ask questions and find answers from past discussions.

1 – Create an Expression: Scenario 1

Start this exercise by creating a standalone rule expression object. Follow the steps below.

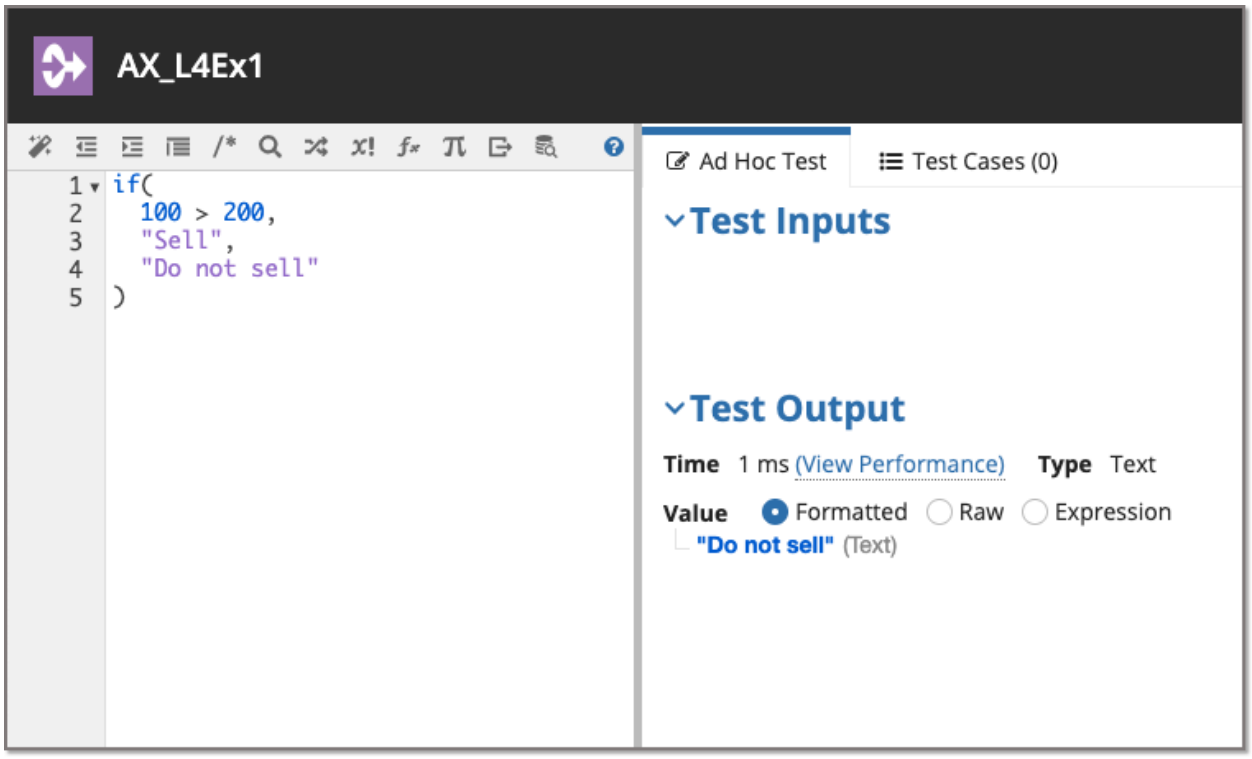
1. Log into your Appian Community Edition environment, and select the **Acme Exercise** application.
2. Create an expression rule object named **AX_L4Ex1**. Add the description, "Practice for Lesson 4," and store it in the **AX Expressions Practice** folder.
3. **Read the following scenario**:

   You need to compare two numeric values. If the first value is greater than the second value, the message, "Sell" should be displayed. Otherwise, the message, "Do not sell" should be displayed.
4. Write an **If()** statement that will perform what is needed in this scenario.

   Refer to the Appian Docs All Functions page for more information.
5. Enter values to make the statement true, and then click **Test Rule** to verify your test output meets the scenario requirements.
6. Enter values to make the statement false, and then click **Test Rule** to verify your test output meets the scenario requirements.
7. Save changes.

2 – Answer Key

The correct expression is shown in the following screenshot.



3 – Create an Expression: Scenario 2

1. Create a rule expression object named **AX_L4Ex2**. Add the description, "Practice for Lesson 4," and store it in the **AX Expressions Practice** folder.
2. **Read the following scenario**:

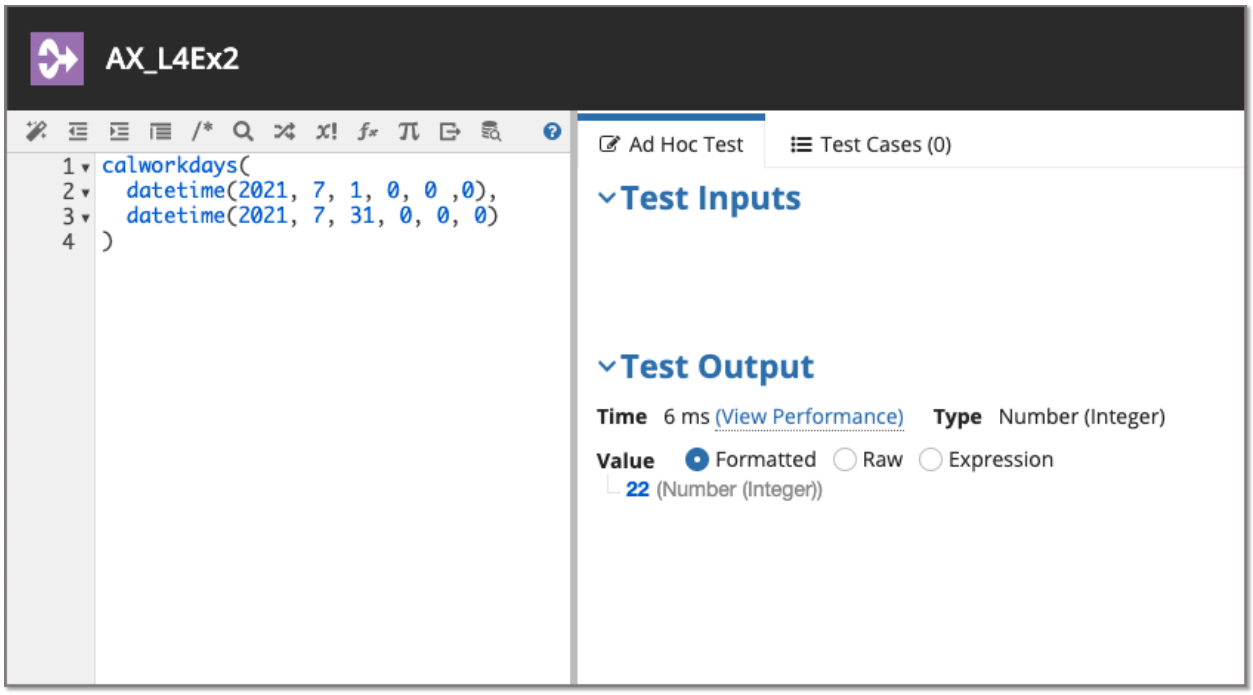
   You need to write an expression that will return the number of business days between the following two dates: July 1, 2021 and July 31, 2021.

   Hint: There is more than one acceptable way to write this expression. Try first using the literal date values, then again using rule inputs.

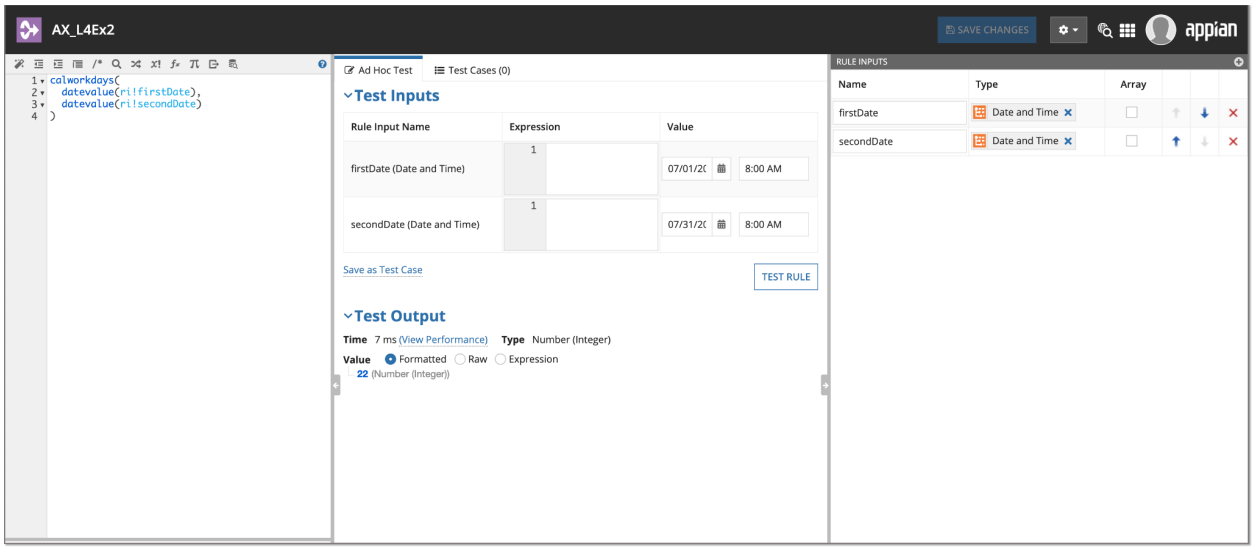
   Refer to the Appian Docs All Functions page for more information.
3. Save changes.

4 – Answer Key

Both answers use the calworkdays() function. The first correct expression uses the datetime() function with literal date values:



The second correct expression uses the datevalue() function with two date rule inputs, and is shown in the following screenshot. You'll need to enter date values in the Test Inputs section.



5 – Challenge Scenario

Ready to try a more challenging expression?

1. Create an expression rule object named **AX_L4Challenge**. Add a description, "Challenge Practice for Lesson 4," and save it in the **AX Expressions Practice** folder.

2. Read the following scenario:

   - The length of a text string variable must not exceed the maximum number of characters, which is also a runtime variable.
   - If it does, the message "Must not exceed [x] characters" should be displayed (where *x* is the maximum length of characters).
   - Otherwise, the message "Thank you for your information." should be displayed.

3. Write an expression to meet the scenario requirements.

   Hint: You need to create rule inputs for the text string and the maximum length. Also, the len() function returns the length in characters of a text string.

   Refer to the Appian Docs All Functions page for more information.

4. Enter rule input values, and test the results.

5. Save changes.

6 – Answer Key

The correct expression is shown below: