Input data - output result value, or a set of values as a JSON string.

Use these for practicing Azure Functions, Web App Remote Methods, and Web API Remote Methods.

Azure Functions

**Exercise 1 - Temperature converter.**  
Name your Azure Function: CalcTemp  
Input "value" (like "argument/parameter") f - degrees Fahrenheit value

Output value c - converted to degrees Celcius.  
Conversion formula is:  
c = (f - 32) \* 100 / 180

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**Exercise 2** - Create an Azure Function calculator for gallons to litres

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**Exercise 3** - GST tax  
In New Zealand, a 15 percent GST tax gets added to most goods and services.  
Create a program where we can input a raw cost and output the cost including GST.  
You need to find, adapt or create a formula for percentage increase.  
Advanced - Function/Method with 2 inputs: raw cost and tax rate so that this is useful for more than one country  
or can adapt if the New Zealand tax rate changes.

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**Exercise 4 - Cost Estimate**

A challenge! JPC has not been able to get Azure Function to work with more than one input.  
All of us can attempt this and if no good result then we can input more than one value as a single JSON string

We can estimate the cost of building a house in Tribnia based on its area in square metres.

But we also need to include a cost for building on a hill. The steeper the hill, the greater the house cost.

Use the formula:

estimated\_cost = (area \* 2300) + (hill\_angle \* 2000)

But wait, there's more!

The Tribnia Council has a rule that it is unsafe to build on a hill with an angle of more than 40 degrees.  
We therefore need to build into this algorithm:  
if the hill angle is greater than 40 degrees then we need to indicate to the caller that there is a problem.

For your first version, you can return a value of -1 to indicate an error condition.  
We will then work on improved versions that return more useful error messages.

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We will repeat some of these exercises and do new ones as we progress through

Azure Functions

ASP.NET Web App Remote Methods

ASP.NET Web API Remote Methods