Weekly Challenge

Solve the challenge, share your solution and summit the ranks of our Community!

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IDEAS WANTED

We're actively looking for ideas on how to improve Weekly Challenges and would love to hear what you think!

SUBMIT FEEDBACK

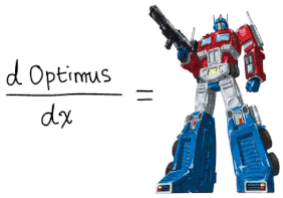
Weekly Challenge

Challenge #79: Find the Closest Prime Number

JoeM
Alteryx Alumni (Retired)

View last week's challenge HERE.

This week's challenge is simple to grasp, but more difficult to execute. This week, let's make an application that finds the closest prime number to a users input.



A prime number is a number that has two positive divisors - 1 and itself.
Without the use of a lookup table, please build an app that takes a user-entered number and returns the closest prime number to the entered number.

Fun fact: this post went live on 07/31/2017 - a very prime day indeed!

challenge_79_start_file.yxmd

challenge_79_solution.yxzp

Apps | Interface | Intermediate | Join | Macros | Preparation | Transform

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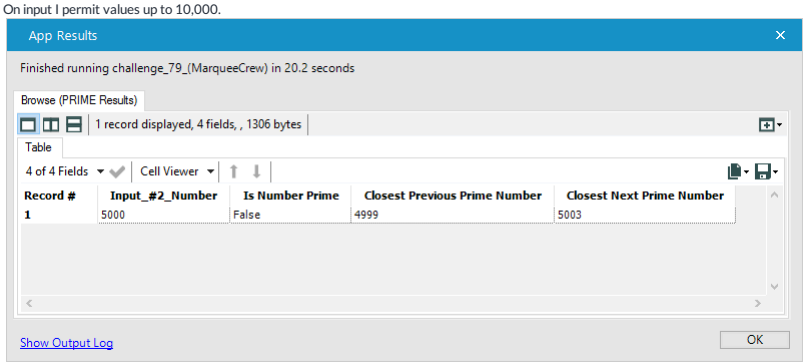
MarqueeCrew
19 - Altair

@JoeM,

I hope that I didn't make my life harder with this prime problem. I created an application that on output answers your question, plus it states:

Is the number itself PRIME?
What is the previous largest PRIME number?
What is the next largest PRIME number?

On input I permit values up to 10,000.



Cheers,
Mark

Alteryx ACE & Top Community Contributor

Chaos reigns within. Repent, reflect and restart. Order shall return.
Please Subscribe to my youTube channel.

challenge_79_(MarqueeCrew).yxwz

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nick_ceneviva
11 - Bolide

Solution is attached. Not sure if I took the most efficient way for determining the closest prime number but it works!

challenge_79_Ceneviva.yxmd

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Joe_Mako
12 - Quasar

Can we use R?

Spoiler

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NicoleJohnson
15 - Aurora

My solution attached! Definitely borrowed the concept of testing for closest prime in either direction from @MarqueeCrew (thanks Mark!), but definitely a different path to the final solution. Added one more calculation for which number was technically "closer": Number itself, the next prime, the previous prime, or tied.

Spoiler

Happy Day o' Prime Numbers!

NJ

Challenge79_NicoleJohnson.yxwz

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estherb47
15 - Aurora

My solution. Another fun challenge. Decided that the output should be in a report, and should result in the next lowest and highest primes, as well as the closest.

challenge_79_EHB_Solution.yxwz

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patrick_digan
17 - Castor

Spoiler

Challenge79.yxzp

Share 2 LIKES Reply

EmanueleE
8 - Asteroid

Here my Solution!!!

Into this app you can write your number and it finds the nearest prime number (above or below the chosen number).

Spoiler

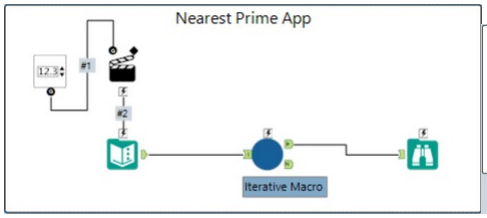
Challenge_79-EE-App.yxwz

Challenge_79-EE-FLOW.yxmd

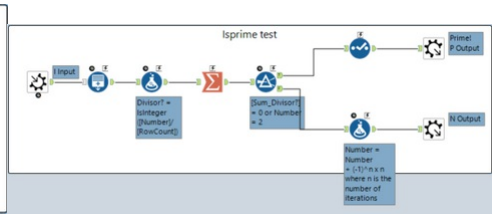
Share 0 LIKES Reply

PhilipMannering
15 - Aurora

Spoiler



The App using an iterative macro



Check if prime, and iterate if not.

challenge_79 - Nearest Prime App.yxwz

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lminors
9 - Comet

Ah lovely @JoeM! Spent the last week playing with iterative macros so seemed like an obvious choice when I saw the challenge. Solution below:

▷ Spoiler

Thoroughly enjoyable.

Luke
Alteryx Certified Partner with Keyrus UK

Share 4 LIKES Reply

La