

We've recently made an accessibility improvement to the community and therefore posts without any content are no longer allowed. Please use the spoiler feature or add a short message in the message body in order to submit your weekly challenge.

2022-05-26 Updates: Email: If you're not seeing emails be delivered from the Community, please check your spam and mark the Community emails as not junk. Thank you for your patience.



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## 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!

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[Weekly Challenge](#)

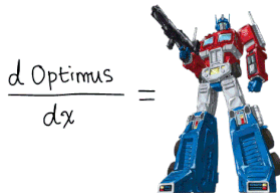
## Challenge #79: Find the Closest Prime Number



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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ACE MarqueeCrew  
19 - Altair

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@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.

App Results

Finished running challenge\_79\_(MarqueeCrew) in 20.2 seconds

Browse (PRIME Results)

1 record displayed, 4 fields, , 1306 bytes

Table

4 of 4 Fields | Cell Viewer | | |

Record #	Input_#2_Number	Is Number Prime	Closest Previous Prime Number	Closest Next Prime Number
1	5000	False	4999	5003

Show Output Log

OK

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 



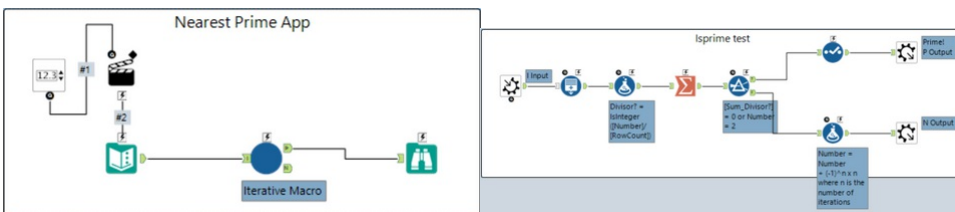
[Share](#) 2 LIKES[Reply](#)**ACE estherb47**  
15 - Aurora

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 [Share](#) 1 LIKE[Reply](#)**ACE 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](#)**ACE PhilipManning**  
15 - Aurora[▷ Spoiler](#)

The App using an iterative macro

Check if prime, and iterate if not.

 challenge\_79 - Nearest Prime App.yxwz [Share](#) 2 LIKES[Reply](#)**Iminors**  
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

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