Weekly Challenge

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

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IDEAS WANTED

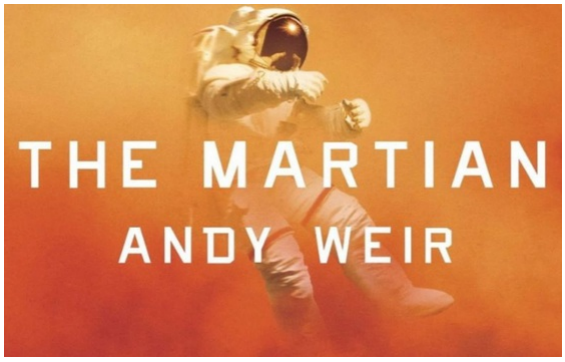
We're actively looking for ideas on how to improve Weekly Challenges and would love to hear what you think!

SUBMIT FEEDBACK

Challenge #61: Save the Astronaut

JoeM
Alteryx Alumni (Retired)

The answer to last week's challenge can be found HERE.



In the novel, "The Martian", astronaut Mark Watney is stranded on Mars. After getting a rover that transmits video back to earth, Watney communicates with mission control by setting up cards on sticks surrounding the rover – knowing the rover can rotate the camera 360 degrees. His method would be to show the rover camera a question, then record the letters that the mission control then points the rover camera at to assemble a response. However, knowing that there are 26 letters in the English alphabet, he realizes that the letters surrounding the rover would only be separated by 13 degrees – making it more difficult to understand what the rover is pointing at. As a solution, he then decides to set up the surrounding cards using the hexadecimal characters 0-9, A-F (16 cards + 1 card serving as the question). If the question card is sitting at 0 degrees and the 16 other letters (0-9, A-F) are ordered around the rover, the camera can only pan at 4 degrees per second, how long will it take for the rover to return the following message: "We are sending another mission. It will take 42 months."?
Note: Assume the camera starts on the question card and ends on the last letter.

challenge_61_start_file.yxmd

challenge_61_solution.yxmd

Data Analysis | Developer | Difficult | Join | Parse | Preparation | Transform

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MarqueeCrew
19 - Altair

@JoeM,

With the cards setup at equal distances around the rover, I have a question about the capability of the rover to pan left and right. If the rover only pans right, then the distance from 10 degrees to 0 degrees is 350. If it can go left, the distance is 10 degrees. What assumption can you share or should we figure that out for ourselves?

Cheers,
Mark

Alteryx ACE & Top Community Contributor

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

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If you wanna see the scene from the movie: https://www.youtube.com/watch?v=ffB0Je-xjKg

@JoeM I cannot find the exact same result, somehow my camera is 9 seconds slower than yours :(.

Assumptions:

Spoiler

Solution:

Spoiler

challenge_61_MK.yxmd

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MarqueeCrew
19 - Altair

@Max06270,

I watched the clip (twice) and noticed that they didn't include punctuation in the text. Did you?

I don't want to look inside of the spoiler tags.

Alteryx ACE & Top Community Contributor

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

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Max06270
7 - Meteor

I used exactly "We are sending another mission. It will take 42 months." which is the string in the response text input from the workflow, including punctuation.

Since I am not getting exactly the same number of seconds, in my original post Spoiler1 is the assumptions I made and Spoiler2 is the image of the workflow.

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MarqueeCrew
19 - Altair

How literal of you.

I would of course want to use all caps and remove punctuation so that i could reduce the time that it takes to message.

Alteryx ACE & Top Community Contributor

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

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alex
11 - Bolide

Assumptions in my solution are as follows inside spoiler tag

Spoiler

I'm still 16 seconds off

Spoiler

Martian-AC.yxmd

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MarqueeCrew
19 - Altair

@JoeM

I have posted my solution.

After finishing mine, I compared our results and we're matching. I got there in a more convoluted way than you did.

▷ Spoiler

So after writing code and using the API to NASA for Code calculations.... (just kidding)

Well played @Max06270 & @alex

Alteryx ACE & Top Community Contributor

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

challenge_61_MarqueeCrew.yxmd

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Natasha
9 - Comet

Here is my solution. I am pretty close, but also can't get the exact number of seconds.

At first I was way off, but then used @Max06270 assumption that the camera stops one second at each card, which makes sense, and my camera become 9 sec slower.

If I read the task carefully, the last sentence says " Note: **Assume the camera** starts on the question card and **ends on the last letter."**
Removing the last dot made my camera 25 sec faster.

▷ Spoiler

challenge_61_NK.yxmd

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JoeM
Alteryx Alumni (Retired)

This week's solution has been posted. It's great to see all the different assumptions being called out - even some I had failed to take into account (re: stopping camera on each letter being a big one). Hope you had fun trying to think your way through that one!

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