

Cryptography Challenge:

Journey home in Tokyo

tokyo.png

q.txt

Provided files: **tokyo.png** & **q.txt**

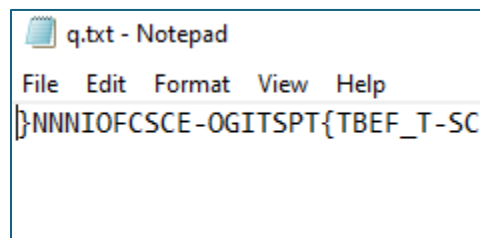
Approach:

Download and open the files.

tokyo.png



q.txt



So the flag must be **}NNNIOFCSCE-OGITSPT{TBEF_T-SC**

But we need to decipher using the hint. It seems to be the railway map of Tokyo.

Train-related Ciphers

1. Rail Fence Cipher

- Classic transposition cipher.
- Text is written in a zigzag pattern across multiple "rails" (like a fence), then read off row by row.
- Example:
 - Plain: HELLO WORLD
 - Zigzag (3 rails):

mathematica

Copy code

H L O L
E L W R D
L O

- Ciphertext: HLOLELWRDLO

Interesting, lets try that on CyberChef and play around with the key:

The image shows the CyberChef web application interface. On the left, under the 'Recipe' tab, the 'Rail Fence Cipher Decode' recipe is selected. It has two input fields: 'Key' with the value '3' and 'Offset' with the value '0'. On the right, the 'Input' field contains the text '}NNNIOFCSCE-OGITSPT{TBEF_T-Sd'. Below the input, there is a small display showing 'abc 29' and '1'. The 'Output' field on the right displays the result: '}SECNEF-NO_GNITTIS-POTS{FTCBC'.

{FTCBC looks like CBCTF{ in reverse.

Applying reverse to the recipe

The image shows the CyberChef web application interface with two recipes. The 'Rail Fence Cipher Decode' recipe is still present with 'Key' 3 and 'Offset' 0. Below it, a 'Reverse' recipe is added. The 'Reverse' recipe has a 'By' dropdown set to 'Character'. The 'Input' field on the right remains the same: '}NNNIOFCSCE-OGITSPT{TBEF_T-Sd'. The 'Output' field now shows the result of reversing the previous output: 'CBCTF{STOP-SITTING_ON-FENCES}'.

Noice!

Flag:

CBCTF{STOP-SITTING_ON-FENCES}