

GUIDE

Use the website to check your answers for every stage.

Stage 1

There are 2 photos. A message is hidden using the 2 photos. Find the hidden message to solve Stage 2.

Stage 2

In this stage, you are to find the most efficient path from an initial to a final node. This information is obtained from Stage 1. Represent your most efficient path using nodes. Suppose the initial node is a_1 and the final node is a_{12} . If the most efficient path, inclusive of initial and final, for example, is $[a_1, a_2, a_{10}, a_{11}, a_{12}]$, represent the answer as $[1, 2, 10, 11, 12]$. Key into the website with the square brackets and no spaces to check your answer.

Stage 3

2 keys are needed to decipher the message in Stage 3. One key is provided to you.

`Xr"co}"rgdrylx#vjbx"pkdkw#ys"vimu ebnxhiq."jqoefjaxhp|"FSSR 41!`

The other key is obtained from Stage 2.

Using your answer in Stage 2, take $\text{mod } 5$ for every element in the path. If your answer to Stage 2 is $[1, 51, 48, 3]$, then the “converted” list will be $[1, 1, 3, 3]$. This will be the other key

Stage 4

$$C \equiv m^e \pmod{n}$$

C: Ciphertext, 88381628651586574911841376827

m: Original message (converted to number), 988248110997968101

e: Public key, 89313067008001

n: Mod, 99394964034952494350006468443

We have provided C, e and n. Determine m (in text).