

## RED

The RED challenge is submitted by Shuailin Pan. The challenge is carried out as following: In order to fulfill the RED challenge, only the pure red PNG image was provided, which looks the same everywhere. However, it was suggested that “something is hidden inside.” Therefore, I tried to use the zsteg tool, which is an image steganography detection tool, and got the output, which is the Base64 string embedded in the least significant bits of the RGBA channels.

The created string turned out to be a flag after Base64 decoding:

picoCTF{r3d\_1s\_th3\_ult1m4t3\_cur3\_f0r\_54dn355\_}. The problem again proved that it is possible for even simple images to hold hidden information. As one can see once again, in order to perform a good and thorough investigation, one should be very meticulous and use special tools to reveal all possible information.