

**RED**

**Flag** : picoCTF{r3d\_1s\_th3\_ult1m4t3\_cur3\_f0r\_54dn355\_}

## Solution Approach

- Given a png file which is entire red in color .



2. First i check the strings for some hidden data .

```
⚡ anubrata >> strings red.png  
IHDR  
tEXtPoem  
Crimson heart, vibrant and bold,  
Hearts flutter at your sight.  
Evenings glow softly red,  
Cherries burst with sweet life.  
Kisses linger with your warmth.  
Love deep as merlot.  
Scarlet leaves falling softly,  
Bold in every stroke.x  
IDATx  
IEND
```

3. It is written "CHECK LSB" so we need to check the LSB of the pic [Steganography]
  4. I open the CyberChef and create a recipe

The screenshot shows the Extract LSB tool interface. The top bar has a 'Recipe' label and standard file operations (Save, Open, Delete). Below it is an 'Input' section with a 'PNG' file selected. The main area is titled 'Extract LSB' and contains several configuration fields:

- Colour Pattern #1: R
- Colour Pattern #2: G
- Colour Pattern #3: B
- Colour Pattern #4: A
- Pixel Order Row
- Bit 0

The 'Output' section displays the base64 encoded binary data: cGljb0NURntyM2RfMXNfdGgzX3VsdDftNHQzX2N1cjNfZjByXzU0ZG4zNTVffQ==cGljbffQ==cGljb0NURntyM2RfMXNfdGgzX3VsdDftNHQzX2N1cjNfZjByXzU0ZG4zNTVffQ==4zNTVffQ==cGljb0NURntyM2RfMXNfdGgzX3VsdDftNHQzX2N1cjNfZjByXzU0ZG4zNTVzU0ZG4zNTVffQ==cGljb0NURntyM2RfMXNfdGgzX3VsdDftNHQzX2N1cjNfZjByXzU0ZG4zNTVffQ==cGljb0NURntyM2RfMXNfdGgzX3VsdDftNHQzX2N1cjNfZjByXzU0ZG4zNTVffQ==cGljb0NURntyM2RfMXNfdGgzX3VsdDftNHQzX2N1cjNfZjByXzU0ZG4zNTVffQ==

5. This is a base64 string repeated again and again . so I decode it using base64

## 6. I get the Flag !!