

**Category:**

Forensics

**Name:**

LINE to PLAIN

**Message:**

Find the flag from the file.

**Objective:**

Extract message hidden in the line2plain\_o65537.png

**Instructions:**

o65537 provides number of pixels to be offset (does not have to do this but makes it easier to solve).

When LSB is extracted and decoded as ASCII text you would see message bracketed by "<LINE>" and "<PLAIN>". Converting the bracketed message to binary value gives you following.

```
1111111011001010001111111100000100001100010100000110111010111000110010111011011
1010111001000010111011011101000111000001011101100000101010100110100000111111110
1010101010111111100000000111011011000000000101011111010010111101101011101000101
11000110000011111101110011110111001111100101001001010101110111001011001110010
1111000100000110010011010111101111100100100100110000100010101100100001011011001
000111101101010101100111111100000000011011111100011101111111101101001110101111
1100000101101110010001011010111010000000101111100111011101011011110010110100101
1101001111011100111101100000101100100110001000011111110001100111011110110000000
```

As the name of file says line to plain, make the value into a matrix.

The length of value is 632 which also is  $25 \times 25 + 7$ , where the last 7 bits obviously are paddings.

QR code can be generated by the matrix and flag can be obtained by reading it.