```
import numpy as np
from PIL import Image
im = Image.open(IMAGE HERE)
rgb_im = im.convert('RGB')
zero = "0"
width, height = im.size
def color(x):
      if len(str(x)) == 1:
           x_2 = zero + zero + str(x)
           return str(x_2)
      elif len(str(x)) = 2:
            x_3 = zero + str(x)
           return str(x_3)
      else:
           return x
\mathbf{def} total (\mathbf{d}, \mathbf{y}, \mathbf{z}):
      total_1 = str(d) + str(y) + str(z)
     return total_1
def numbers(x):
      if len(x) == 7:
            \mathbf{r} = \mathbf{str}(\mathbf{x})[0] + \mathbf{str}(\mathbf{x})[1] + \mathbf{str}(\mathbf{x})[2] + \mathbf{str}(\mathbf{x})[3] + \mathbf{str}(\mathbf{x})[3]
                 str(x)[4] + str(x)[5] + str(x)[6]
           return(r)
      if len(x) == 8:
           \mathbf{r} = \mathbf{str}(\mathbf{x})[0] + \mathbf{str}(\mathbf{x})[1] + \mathbf{str}(\mathbf{x})[2] + \mathbf{str}(\mathbf{x})[3] + \mathbf{str}(\mathbf{x})[3]
                 \mathbf{str}(\mathbf{x})[4] + \mathbf{str}(\mathbf{x})[5] + \mathbf{str}(\mathbf{x})[6] + \mathbf{str}(\mathbf{x})[7]
           return(r)
      if len(x) == 9:
           r = str(x)[0] + str(x)[1] + str(x)[2] + str(x)[3] + 
                 str(x)[4] + str(x)[5] + str(x)[6] + str(x)[7] + str(x)[8]
           return(r)
```

```
set1 = []
array = []
for original in range(1, int(height)*int(width) +1):
    in_array = []
    for values in range(int(height)*int(width), 0, 1):
        in_array.append(original ** (values
    array.append(in_array)
for y in range(0, int(height)):
    for x in range (0, int(width)):
        r, g, b = rgb_im.getpixel((x, y))
        print(r,g,b)
        initial = total(color(r), str(color(g)), str(color(b)))
        initial_2 = numbers(initial)
        set1.append(float(initial_2))
sol = np.linalg.solve(array, set1)
print(sol)
for x,y in zip(range(int(height) * int(width) 1, 1, 1),
               range(0, int(height) * int(width))):
   print (sol[y], "x**", x)
```