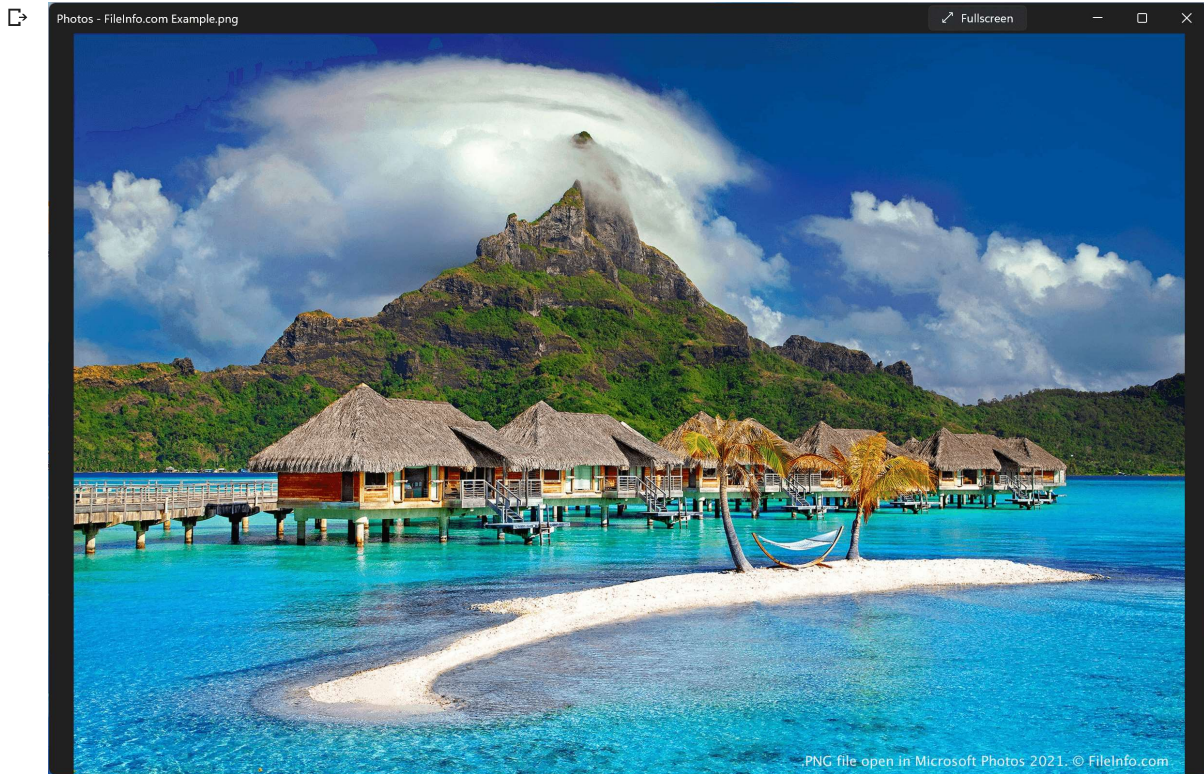


```
!pip install imageio
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/  
Requirement already satisfied: imageio in /usr/local/lib/python3.8/dist-packages (2.9.0)  
Requirement already satisfied: pillow in /usr/local/lib/python3.8/dist-packages (from imageio) (8.4.0)  
Requirement already satisfied: numpy in /usr/local/lib/python3.8/dist-packages (from imageio) (1.22.4)
```

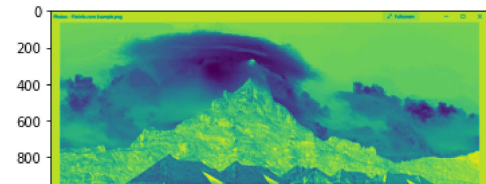
```
%matplotlib inline  
import imageio  
import requests  
import matplotlib.pyplot as plt  
import IPython.display as dp
```

```
img = 'https://fileinfo.com/img/ss/xl/png_79.png'  
dp.Image(requests.get(img).content)
```



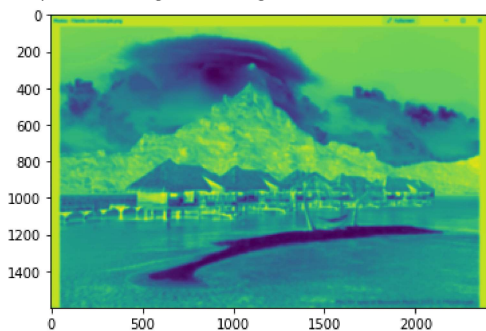
```
source_img = imageio.imread(img)  
  
import numpy as np  
def grayscaleing(rgb):  
    return np.dot(rgb[...,:3],[0.299,0.587,0.114])  
grayscale_img = grayscaleing(source_img)  
  
inv_img = (255 - grayscale_img)  
plt.imshow(inv_img)
```

<matplotlib.image.AxesImage at 0x7fd85aee5e0>



```
import scipy.ndimage
blurred_img = scipy.ndimage.filters.gaussian_filter(inv_img, sigma=5)
plt.imshow(blurred_img)
```

<matplotlib.image.AxesImage at 0x7fd7fbacedc0>



```
def dodging(blur_img, grysc1_img):
    resultant_dodge=blur_img*255/(255-grysc1_img)
    resultant_dodge[resultant_dodge>255]=255
    resultant_dodge[grysc1_img==255]=255
    return resultant_dodge.astype('uint8')
```

```
target_img= dodging(blurred_img, grysc1_img)
```

```
%matplotlib inline
import matplotlib.pyplot as plt
plt.imshow(target_img, cmap='gray')
```

<matplotlib.image.AxesImage at 0x7fd7fba3ad00>

