 Generate

10 random numbers using numpy



Close

```
!pip install opencv-python-headless
```

```
Requirement already satisfied: opencv-python-headless in /usr/local/lib/python3.10/dist-packages (4.10.0.84)  
Requirement already satisfied: numpy>=1.21.2 in /usr/local/lib/python3.10/dist-packages (from opencv-python-headless) (1.26.4)
```

```
import cv2  
import numpy as np  
import matplotlib.pyplot as plt
```

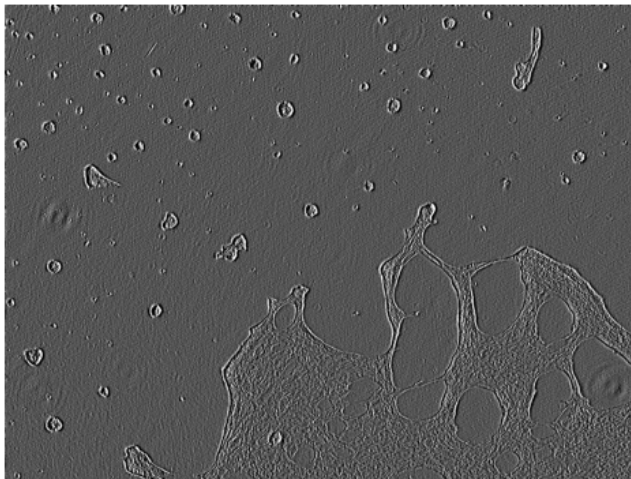
```
import cv2  
import matplotlib.pyplot as plt
```

```
img = cv2.imread('/content/_DIC8.png', cv2.IMREAD_GRAYSCALE)
```

```
if img is not None:  
    plt.figure(figsize=(6,6))  
    plt.imshow(img, cmap='gray')  
    plt.title('Imagen de entrada en Escala de Grises')  
    plt.axis('off')  
    plt.show()
```



Imagen de entrada en Escala de Grises



```
threshold_value = 128  
_, binary_mask = cv2.threshold(img, threshold_value, 255, cv2.THRESH_BINARY)  
  
plt.imshow(binary_mask, cmap='gray')  
plt.title('Máscara Binaria')  
plt.show()
```



Máscara Binaria



```
kernel = np.ones((5, 5), np.uint8)
```

```
eroded_image = cv2.erode(binary_mask, kernel, iterations=1)
```

```
dilated_image = cv2.dilate(binary_mask, kernel, iterations=1)
```

```
plt.figure(figsize=(10, 5))
plt.subplot(1, 2, 1)
plt.imshow(eroded_image, cmap='gray')
plt.title('Imagen Erosionada')
plt.subplot(1, 2, 2)
plt.imshow(dilated_image, cmap='gray')
plt.title('Imagen Dilatada')
plt.show()
```



Imagen Erosionada

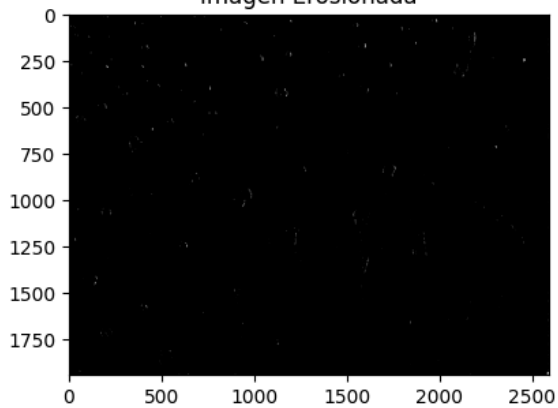


Imagen Dilatada

