

Practical 6:-

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import cv2
import numpy as np
# Load the image
img = cv2.imread('../assets/preview500.jpg')
# Get the current size of the image
height, width, _ = img.shape

# Scale down the image to half its original size
img = cv2.resize(img, (int(width/1.4), int(height/1.4)))
# Define the kernel
kernel = np.ones((5,5), np.uint8)

# Erosion
erosion = cv2.erode(img, kernel, iterations = 1)

# Dilation
dilation = cv2.dilate(img, kernel, iterations = 1)

# Opening
opening = cv2.morphologyEx(img, cv2.MORPH_OPEN, kernel)

# Closing
closing = cv2.morphologyEx(img, cv2.MORPH_CLOSE, kernel)

# Display the images
cv2.imshow('Original', img)
cv2.imshow('Erosion', erosion)
cv2.imshow('Dilation', dilation)
cv2.imshow('Opening', opening)
cv2.imshow('Closing', closing)

cv2.waitKey(0)
cv2.destroyAllWindows()
```

