22) Implement the Closing technique as a Morphological operation to dilate the foreground regions based on Open CV.

Code:

import cv2

import numpy as np

Step 1: Load the image

image = cv2.imread(r"C:\Users\harik\Downloads\CV LAB\mountaingrey.jpeg",
cv2.IMREAD_GRAYSCALE)

Step 2: Thresholding to get a binary image (if it's not already binary)

_, binary = cv2.threshold(image, 127, 255, cv2.THRESH_BINARY)

Step 3: Define the kernel (structuring element)

kernel = cv2.getStructuringElement(cv2.MORPH_RECT, (5, 5)) # You can adjust size and shape

Step 4: Apply Closing operation

closed_image = cv2.morphologyEx(binary, cv2.MORPH_CLOSE, kernel)

Step 5: Display the result

cv2.imshow('Original Binary', binary)

cv2.imshow('After Closing', closed_image)

cv2.waitKey(0)

cv2.destroyAllWindows()

OUTPUT:

