8) Perform basic Image Handling and processing operations on the image is to read an image in python and Dilate an Image using Dilate function

CODE:

```
import cv2

import numpy as np


# Step 1: Read the image

image = cv2.imread(r"C:\Users\harik\Downloads\CV LAB\MOUNTAIN.jpeg")  # Replace with your image file path

cv2.imshow('Original Image', image)


# Step 2: Convert to grayscale (recommended before morphological operations)

gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)


# Step 3: Create a binary image (thresholding)

_, binary = cv2.threshold(gray, 120, 255, cv2.THRESH_BINARY)


# Step 4: Define a kernel for dilation

kernel = np.ones((5, 5), np.uint8)  # You can change kernel size


# Step 5: Apply dilation

dilated = cv2.dilate(binary, kernel, iterations=1)


# Step 6: Show results

cv2.imshow('Dilated Image', dilated)


# Wait and close

cv2.waitKey(0)

cv2.destroyAllWindows()
```

OUTPUT: