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

Code:

```
import cv2

import numpy as np


# Load the image in grayscale

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



# Threshold the image to binary (optional, based on your input)

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


# Define a kernel (structuring element)

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


# Apply dilation

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


# Display the result

cv2.imshow('Original', binary)

cv2.imshow('Dilated', dilated_image)

cv2.waitKey(0)

cv2.destroyAllWindows()


# Optional: Save the result

cv2.imwrite('dilated_output.png', dilated_image)
```

OUTPUT: