23). Implement the Top hat technique as a Morphological operation to dilate the foreground regions based on Open CV.

CODE:

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

# Load image in grayscale
image = cv2.imread(r"C:\Users\harik\Downloads\CV LAB\grayscalee.png",
cv2.IMREAD_GRAYSCALE)

# Create structuring element (kernel)
kernel = cv2.getStructuringElement(cv2.MORPH_RECT, (15, 15))  # Adjust size as needed

# Apply Top Hat operation
tophat = cv2.morphologyEx(image, cv2.MORPH_TOPHAT, kernel)

# Optional: Enhance foreground by adding Top Hat result to original
enhanced = cv2.add(image, tophat)

# Display results
plt.figure(figsize=(12, 6))
plt.subplot(1, 3, 1), plt.title("Original"), plt.imshow(image, cmap='gray'), plt.axis('off')
plt.subplot(1, 3, 2), plt.title("Top Hat"), plt.imshow(tophat, cmap='gray'), plt.axis('off')
plt.subplot(1, 3, 3), plt.title("Enhanced (Image + Top Hat)"), plt.imshow(enhanced, cmap='gray'),
plt.axis('off')
plt.tight_layout()
plt.show()
```

OUTPUT: