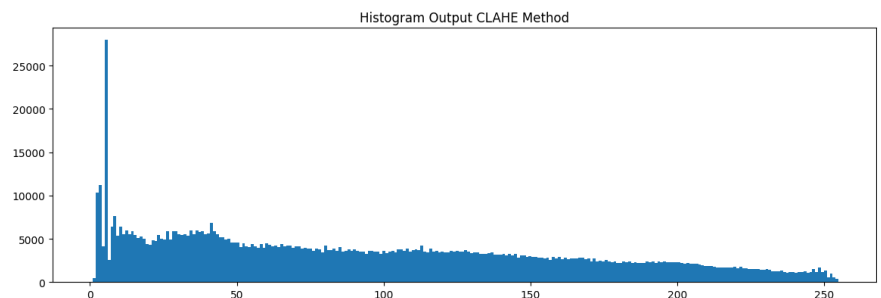
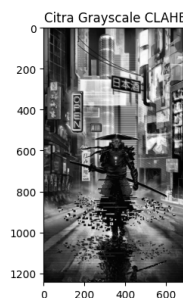
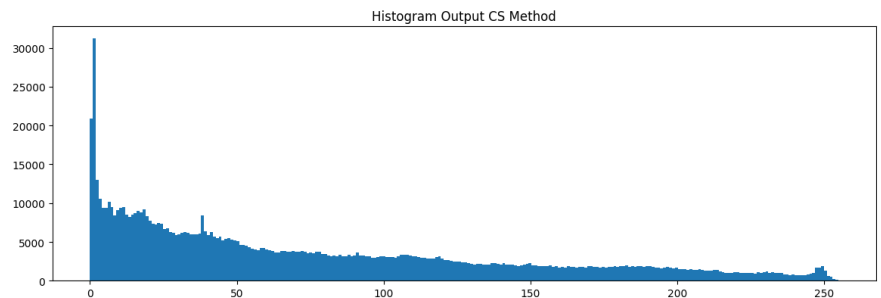
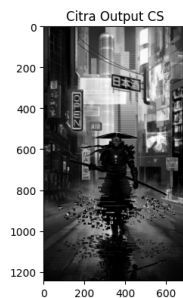
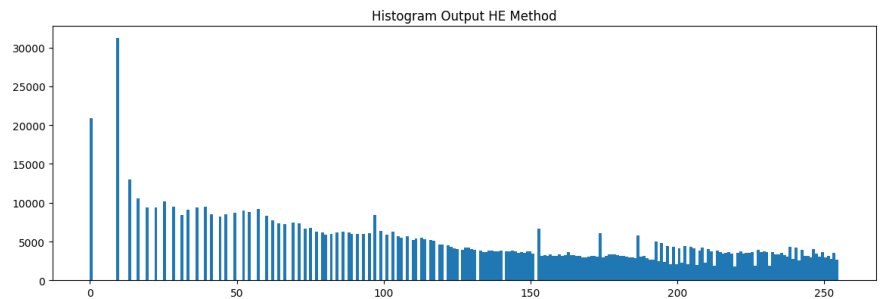
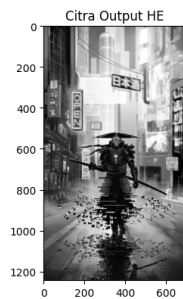
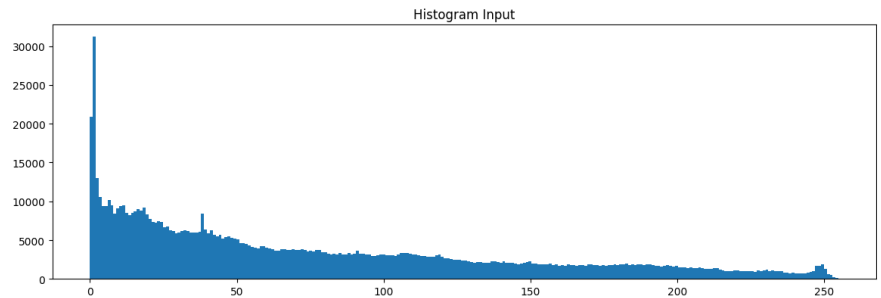
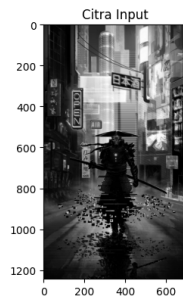


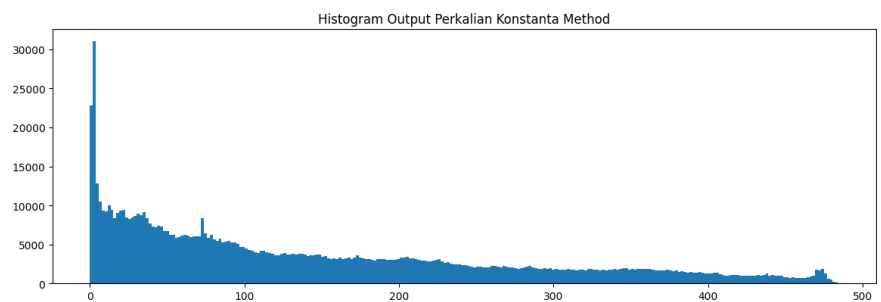
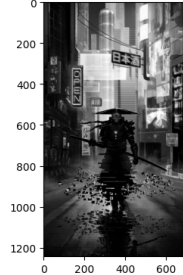
Nama : Muhamad Nasir Nurrohim
NIM : 1207070070
Kelas : PCD – Telekomunikasi

Hasil output dari setiap praktik

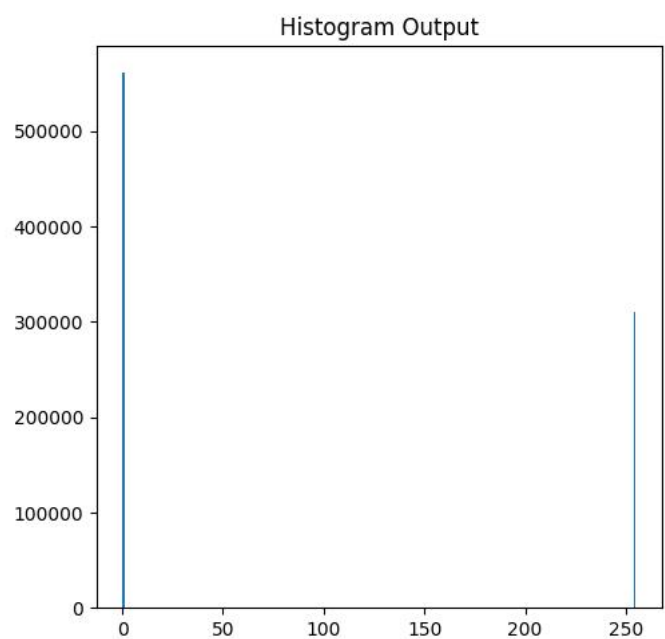
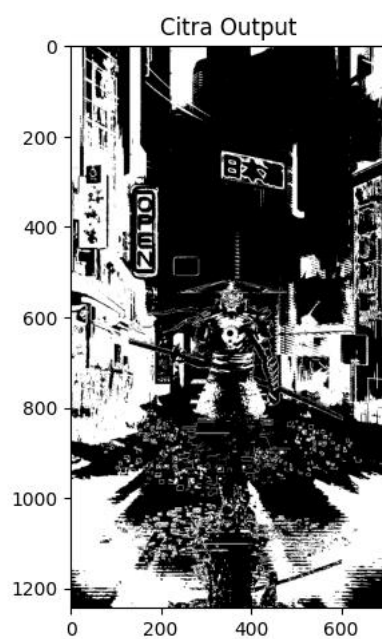
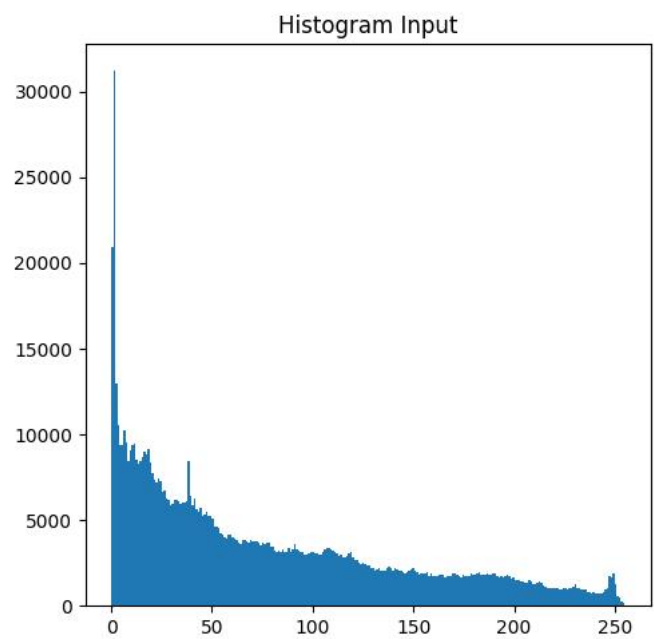
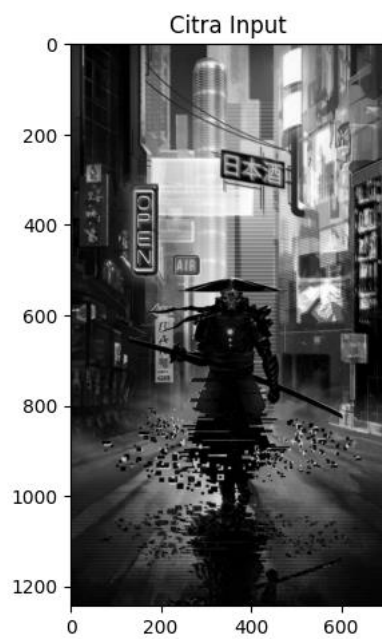
1. Contrast enhancement



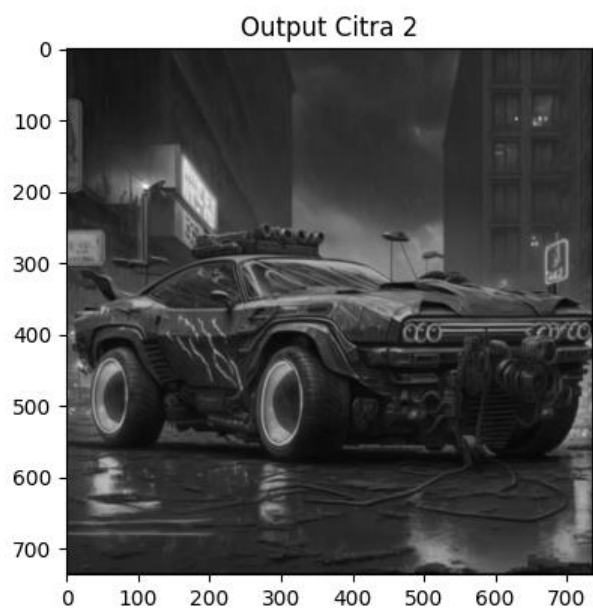
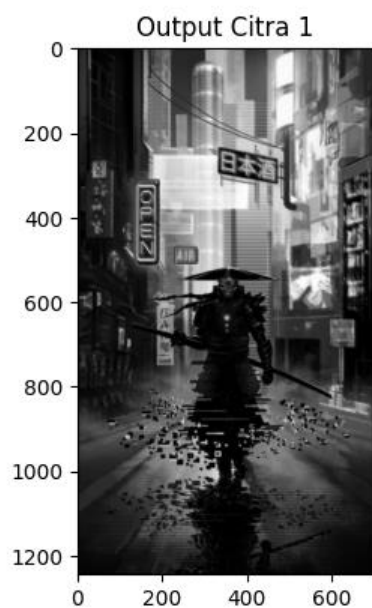
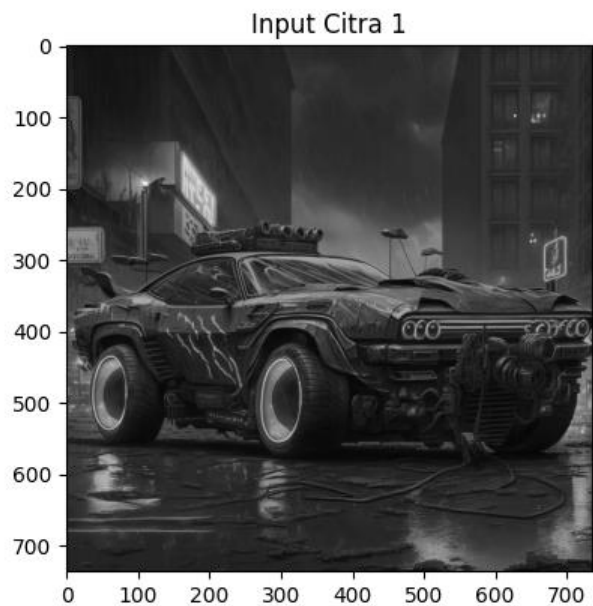
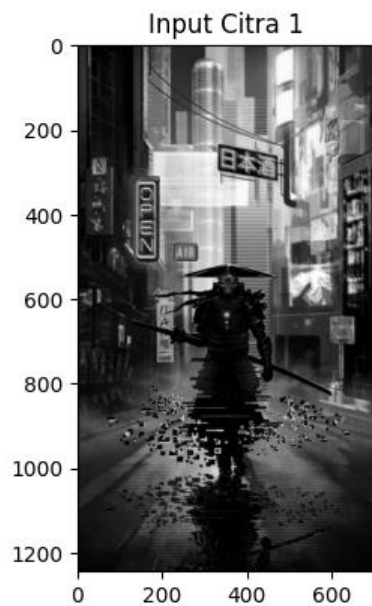
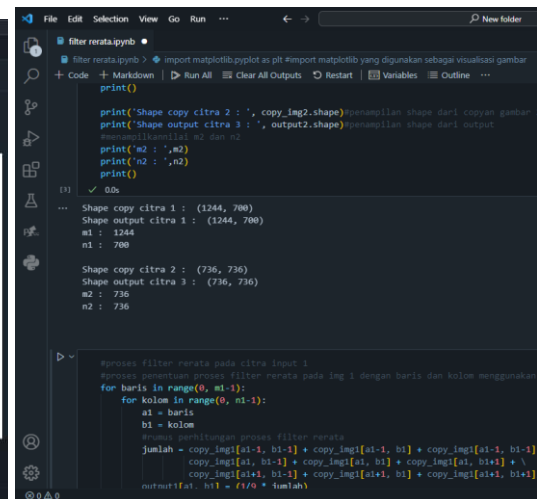
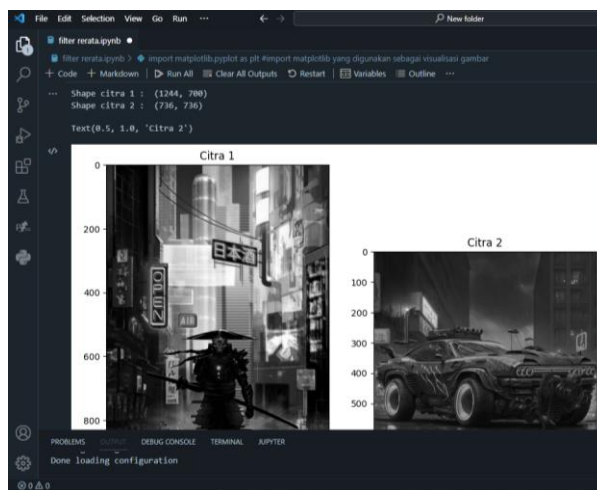
Citra Grayscale Perkalian Konstanta



2. Gray level slicing



3. Filter rerata



4. Filtet Batas

```
File Edit Selection View Go Run ...
filter batas.pyrb • filter batas.pyrb •
import matplotlib.pyplot as plt
import matplotlib.pyplot as plt
import numpy as np
import cv2
import cv2

# Import matplotlib.pyplot as plt
# Import numpy as np
# Import cv2 as cv

# Load image 1
img1 = cv2.imread('img1.jpg')

# Load image 2
img2 = cv2.imread('img2.jpg')

# Copy image 1
copy_img1 = img1.copy()

# Copy image 2
copy_img2 = img2.copy()

# Get shape of image 1
shape_img1 = copy_img1.shape

# Get shape of image 2
shape_img2 = copy_img2.shape

# Create empty array for output 1
output1 = np.empty(shape_img1)

# Create empty array for output 2
output2 = np.empty(shape_img2)

# Apply edge detection to image 1
cv2.Canny(copy_img1, output1, 1)

# Apply edge detection to image 2
cv2.Canny(copy_img2, output2, 1)

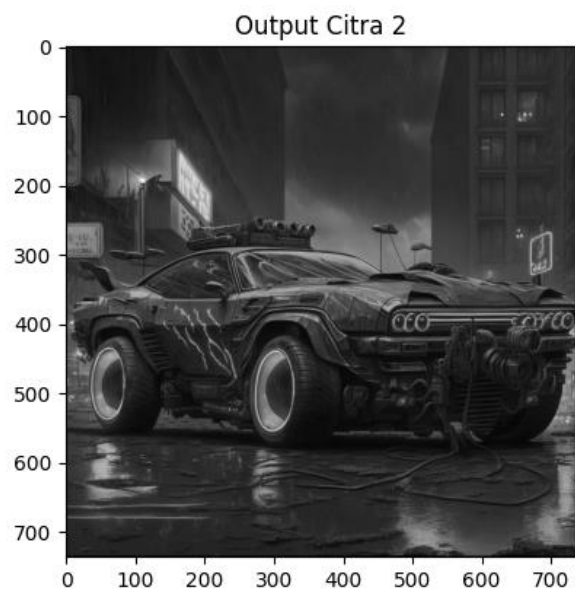
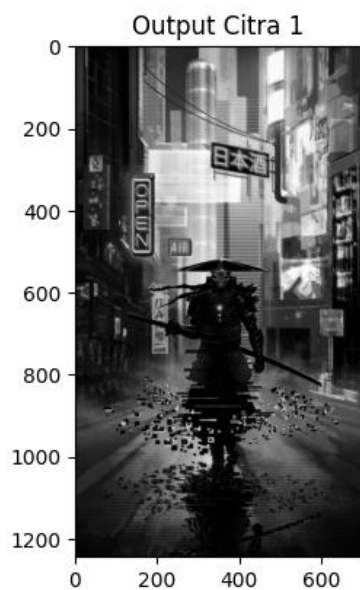
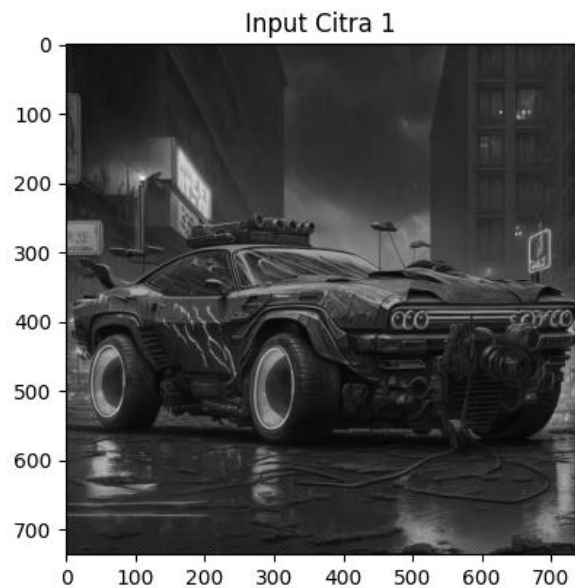
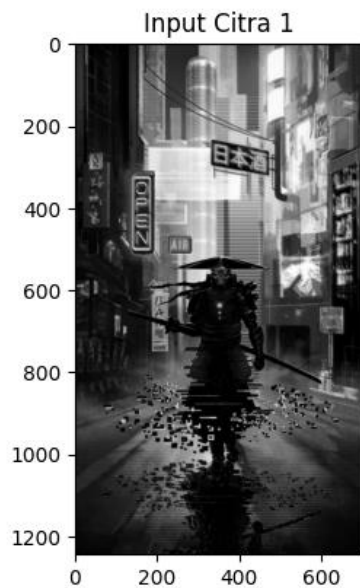
# Display image 1
plt.imshow(copy_img1)

# Display output 1
plt.imshow(output1)

# Display image 2
plt.imshow(copy_img2)

# Display output 2
plt.imshow(output2)

plt.show()
```



5. filter median

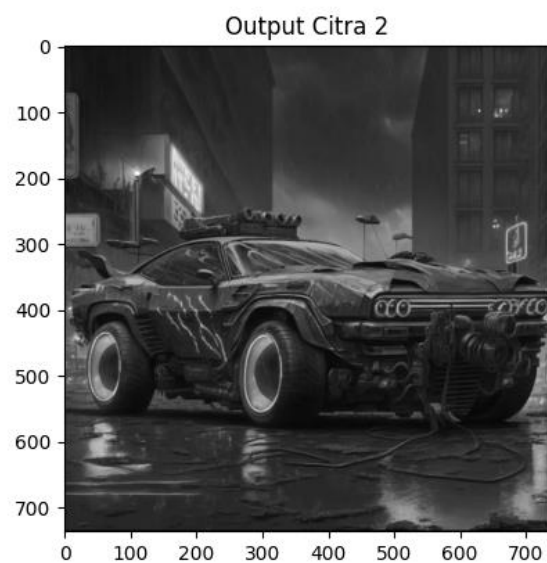
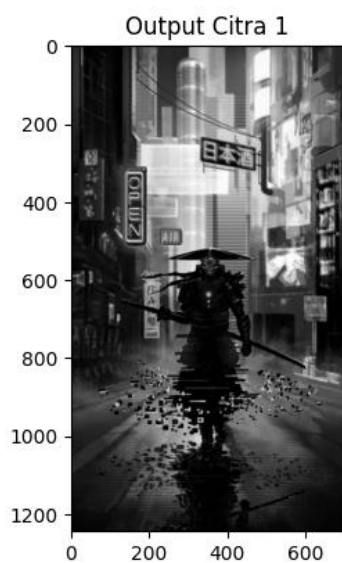
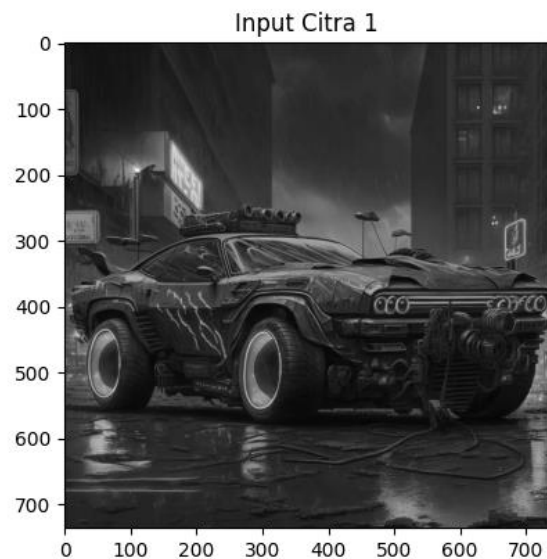
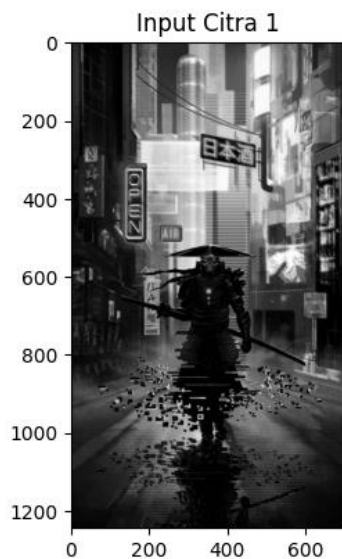
```

File Edit Selection View Go Run ...
contrast enhancement.ipynb • filter batas.ipynb • filter median.ipynb • gray level slicing.ipynb
filter median.ipynb > import matplotlib.pyplot as plt #import matplotlib yang digunakan sebagai visualisasi gambar
+ Code + Markdown | Run All | Clear All Outputs | Restart | Variables | Outline ...
[3] ✓ 1.6s
... Shape citra 1 : (1244, 780)
Shape citra 2 : (736, 736)
Text(0.5, 1.0, 'Citra 2')

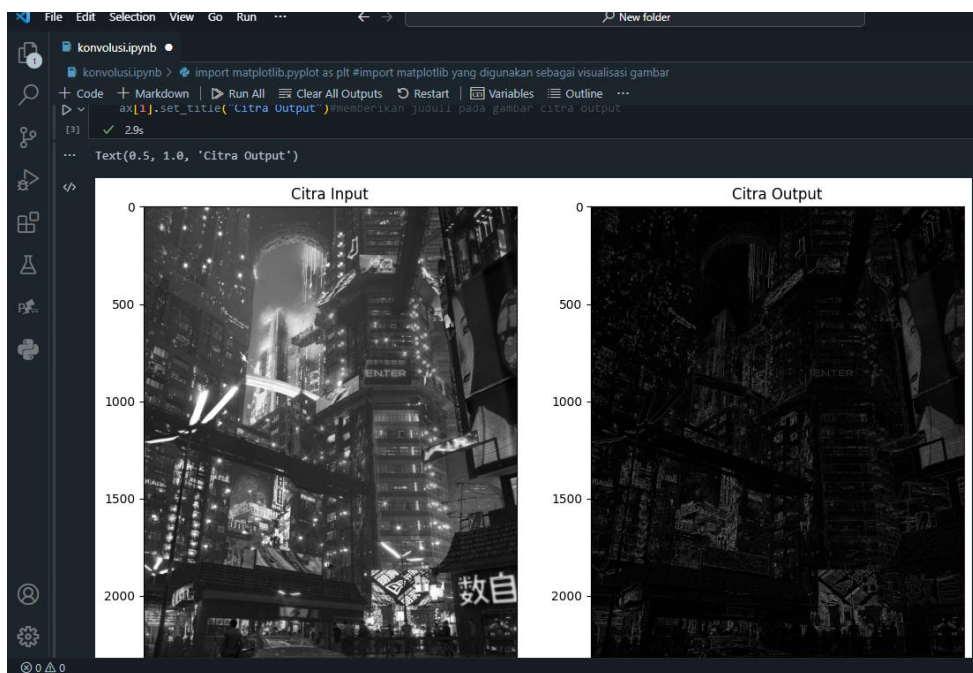
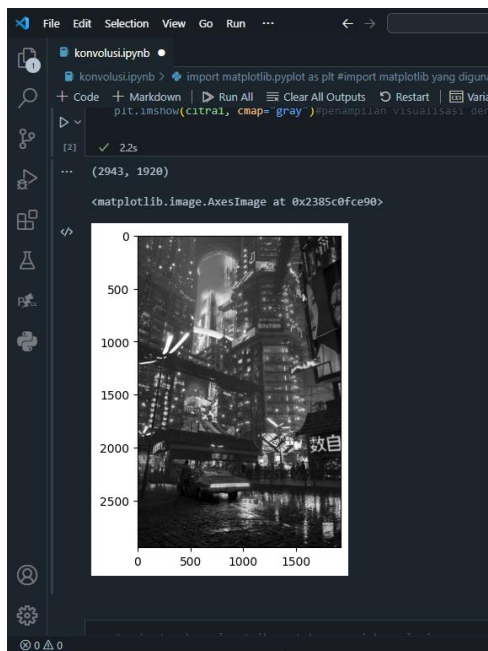
Citra 1
Citra 2

filter median.ipynb > import matplotlib.pyplot as plt #import matplotlib yang digunakan sebagai visualisasi gambar
+ Code + Markdown | Run All | Clear All Outputs | Restart | Variables | Outline ...
[3] ✓ 0.1s
... Shape copy citra 1 : (1244, 780)
Shape output citra 1 : (1244, 780)
m1 : 1244
n1 : 780
Shape copy citra 2 : (736, 736)
Shape output citra 3 : (736, 736)
m2 : 736
n2 : 736

```



6. konvolusi



7. Image filtering

