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Jawaban:

# Import libraries

import numpy as np

import imageio as img

import matplotlib.pyplot as plt

# Load the image

image = img.imread("D:/source.jpg")

# Split channels

red = image[:, :, 0]

green = image[:, :, 1]

blue = image[:, :, 2]

# Create images for each channel

imgRed = np.zeros\_like(image)

imgGreen = np.zeros\_like(image)

imgBlue = np.zeros\_like(image)

# Assign channels to respective images

imgRed[:, :, 0] = red # Only Red channel

imgGreen[:, :, 1] = green # Only Green channel

imgBlue[:, :, 2] = blue # Only Blue channel

```
# Plot the images
plt.figure(figsize=(10, 10))
# Original Image
plt.subplot(4, 1, 1)
plt.imshow(image)
plt.title("Original Image")
# Red Channel
plt.subplot(4, 1, 2)
plt.imshow(imgRed)
plt.title("Red Channel")
# Green Channel
plt.subplot(4, 1, 3)
plt.imshow(imgGreen)
plt.title("Green Channel")
# Blue Channel
plt.subplot(4, 1, 4)
plt.imshow(imgBlue)
plt.title("Blue Channel")
plt.show()
```