

Course: CS3642

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Assignment: Assignment 3

Due Date:

Signature: EA

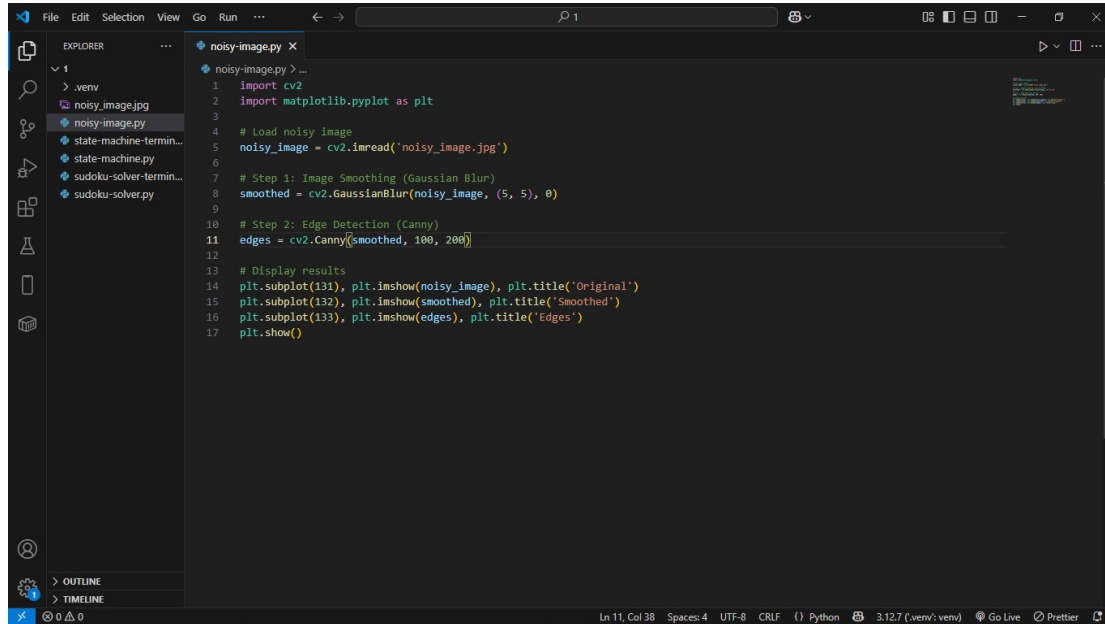
Score

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## Screenshot of source program

Algorithms used, Gaussian blur and Canny Edge Detection



The screenshot shows a code editor with a dark theme. The Explorer panel on the left shows a file named 'noisy\_image.jpg' selected. The main editor area displays the following Python code:

```
1 import cv2
2 import matplotlib.pyplot as plt
3
4 # Load noisy image
5 noisy_image = cv2.imread('noisy_image.jpg')
6
7 # Step 1: Image Smoothing (Gaussian Blur)
8 smoothed = cv2.GaussianBlur(noisy_image, (5, 5), 0)
9
10 # Step 2: Edge Detection (Canny)
11 edges = cv2.Canny(smoothed, 100, 200)
12
13 # Display results
14 plt.subplot(131), plt.imshow(noisy_image), plt.title('Original')
15 plt.subplot(132), plt.imshow(smoothed), plt.title('Smoothed')
16 plt.subplot(133), plt.imshow(edges), plt.title('Edges')
17 plt.show()
```

The status bar at the bottom indicates 'Ln 11, Col 38', 'Spaces: 4', 'UTF-8', 'CRLF', 'Python', '3.12.7 (.venv: venv)', 'Go Live', and 'Prettier'.

## Original Image



## Program Output



## Images Results

