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Adarsh Gourab Das
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2141004066
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```
import cv2
```

```
import numpy as np
```

```
import os
```

```
input_directory = 'D:\Personal Projects\Celebal Technologies\submissions\Week 10\Sample Dataset'
```

```
output_directory = 'D:\Personal Projects\Celebal Technologies\submissions\Week 10\Saved Images\T2Edge'
```

```
os.makedirs(output_directory, exist_ok=True)
```

```
for filename in os.listdir(input_directory):
```

```
    if filename.endswith('.jpg') or filename.endswith('.png'):
```

```
        # Load the image
```

```
        image_path = os.path.join(input_directory, filename)
```

```
        image = cv2.imread(image_path)
```

```
        if image is None:
```

```
            print(f'Could not read image: {filename}')
```

```
            continue
```

```
        gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
```

```
        # Apply Gaussian blur to reduce noise
```

```
        blur = cv2.GaussianBlur(gray, (5, 5), 0)
```

```
        # Apply Canny edge detection
```

```
        edges = cv2.Canny(blur, 100, 200)
```

```
        # Save the edge-detected image
```

```
        output_path = os.path.join(output_directory, filename)
```

```
        cv2.imwrite(output_path, edges)
```

```
        print(f'Processed and saved edges for: {filename}')
```

```
print('All images processed.')
```