CODE:

```python
import numpy as np
from skimage.feature import graycomatrix, graycoprops
from skimage import io, img_as_ubyte
import matplotlib.pyplot as plt

image = io.imread('image.jpg', as_gray=True)
```

```python
image = img_as_ubyte(image)
glcm = graycomatrix(image, distances=[1], angles=[0, np.pi/4, np.pi/2, 3*np.pi/4],
                    levels=256, symmetric=True, normed=True)
```

```python
contrast = graycoprops(glcm, 'contrast')
dissimilarity = graycoprops(glcm, 'dissimilarity')
homogeneity = graycoprops(glcm, 'homogeneity')
energy = graycoprops(glcm, 'energy')
correlation = graycoprops(glcm, 'correlation')
```

```python
print('Contrast:', np.mean(contrast))
print('Dissimilarity:', np.mean(dissimilarity))
print('Homogeneity:', np.mean(homogeneity))
print('Energy:', np.mean(energy))
print('Correlation:', np.mean(correlation))
```

Contrast: 20.95721077264087
Dissimilarity: 1.645347437789784
Homogeneity: 0.6236245184974644
Energy: 0.04590903458405067
Correlation: 0.9945538486782233

```python
features = ['Contrast', 'Dissimilarity', 'Homogeneity', 'Energy', 'Correlation']
values = [np.mean(contrast), np.mean(dissimilarity), np.mean(homogeneity), np.mean
plt.bar(features, values)
plt.title('GLCM Features')
plt.ylabel('Value')
plt.show()
```
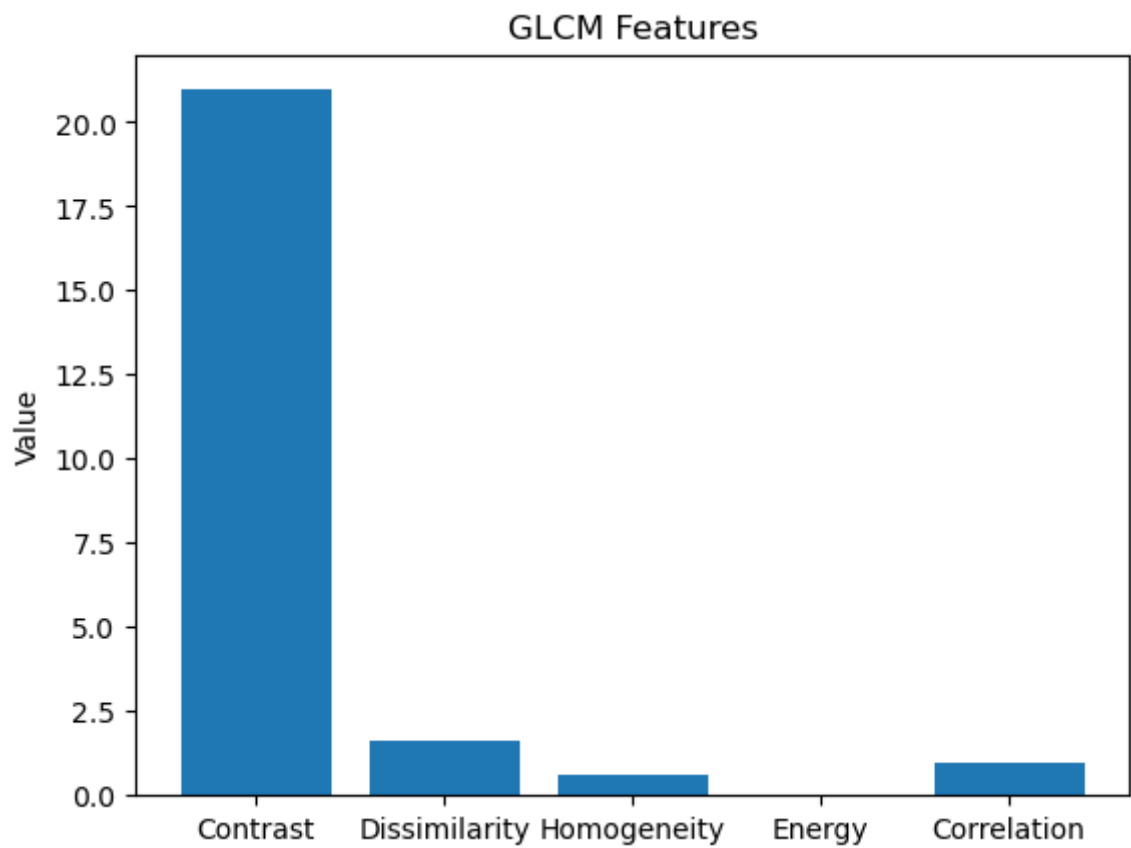
GLCM Features

In [ ]:

RESULT:
    Hence, we successfully implemented Gray-Level Co-Occurrence Matrix (GLCM) for feature extraction.