

```

In [ ]:
from statistics import *

temp = [15.2, 11.0, 16.8, 23.2, 14.3, 21.9, 22.4, 20.5, 15.0, 17.0, 12.8, 21.0, 27.7, 28.0, 18.8, 16.4, 14.9, 20.0, 23.5, 23.9, 24.0, 13.2, 13.6, 12.5, 15.5, 16.5, 17.5, 18.5, 19.5, 20.5, 21.5, 22.5, 23.5, 24.5, 25.5, 26.5, 27.5, 28.5, 29.5, 30.5, 31.5, 32.5, 33.5, 34.5]

print(f'최대 : {max(temp)}')
print(f'최소 : {min(temp)}')
print((max(temp) - min(temp)) // 5)
In [8]:
# 연습문제 5, p41
data = [15.2, 15.3, 16.8, 23.2, 14.3, 21.9, 22.4, 20.5, 15.0, 17.0, 12.8, 21.0, 27.7, 28.0, 18.8, 16.4, 14.9, 20.0, 23.5, 23.9, 24.0, 13.2, 13.6, 12.5, 15.5, 16.5, 17.5, 18.5, 19.5, 20.5, 21.5, 22.5, 23.5, 24.5, 25.5, 26.5, 27.5, 28.5, 29.5, 30.5, 31.5, 32.5, 33.5, 34.5]
bins = [10, 15, 20, 25, 30, 35]
labels = ['10 ~ 14', '15 ~ 19', '20 ~ 24', '25 ~ 29', '30 ~ 34']

freq_table = {}
for label in labels:
    freq_table[label] = 0

for value in data:
    for i in range(len(bins)-1):
        if bins[i] <= value < bins[i+1]:
            freq_table[labels[i]] += 1
        break

print(freq_table)
{'10 ~ 14': 5, '15 ~ 19': 7, '20 ~ 24': 10, '25 ~ 29': 6, '30 ~ 34': 3}
In [9]:
# 연습문제 5.1, p41
import matplotlib.pyplot as plt
import numpy as np

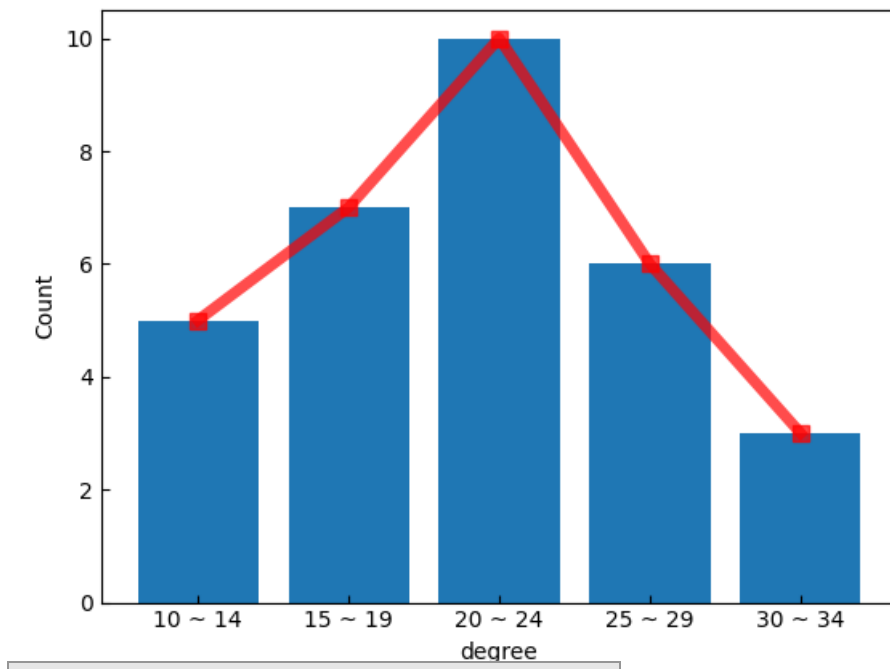
x = np.arange(5)
label = ['10 ~ 14', '15 ~ 19', '20 ~ 24', '25 ~ 29', '30 ~ 34']
values = [5, 7, 10, 6, 3]

fig, ax1 = plt.subplots()
ax1.plot(label, values, '-s', color='red', markersize=7, linewidth=5, alpha=0.7, label='Count')
ax1.set_xlabel('degree')
ax1.set_ylabel('Count')
ax1.tick_params(axis='both', direction='in')

plt.bar(x, values)
plt.xticks(x, label)

plt.show()

```



Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js