In [4]:

```python
# 연습문제 8 p246, node (25)
import numpy as np
from scipy import stats

life = [1.9, 2.4, 3.0, 3.5, 4.2]

x_mean = np.mean(life)
s = np.std(life, ddof=1)

chi2_lower = stats.chi2.ppf((1 - 0.95) / 2, len(life) - 1)
chi2_upper = stats.chi2.ppf((1 + 0.95) / 2, len(life) - 1)

ci_lower = (len(life) - 1) * s ** 2 / chi2_upper
ci_upper = (len(life) - 1) * s ** 2 / chi2_lower

print(f"sigma^2에 대한 95% 신뢰구간 : ({round((ci_lower), 2)} < sigma^2 < {round((ci_upper), 2)})")
```