In [4]:

*#* 연습문제 *9 p247, node (28)* **import** numpy **as** np **from** scipy **import** stats

weight **=** [46.4, 46.1, 45.8, 47.0, 46.1, 45.9, 45.8, 46.9, 45.2, 46.0]

x\_mean **=** np**.**mean(weight) s **=** np**.**std(weight, ddof**=**1)

chi2\_lower **=** stats**.**chi2**.**ppf((1 **-** 0.95) **/** 2, len(weight) **-** 1) chi2\_upper **=** stats**.**chi2**.**ppf((1 **+** 0.95) **/** 2, len(weight) **-** 1)

ci\_lower **=** (len(weight) **-** 1) **\*** s **\*\*** 2 **/** chi2\_upper ci\_upper **=** (len(weight) **-** 1) **\*** s **\*\*** 2 **/** chi2\_lower

print(f"무게 분산에 대한 95% 신뢰구간 : ({round((ci\_lower), 3)} < sigma^2 < {round((ci\_upper), 3)})")

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무게 분산에 대한 95% 신뢰구간 : (0.135 < sigma^2 < 0.954)