

Optional R homework assignment

1. Generate a random sample of size 30 from a normal distribution and compute the usual 95% t confidence interval.
2. Write a function which computes the usual $1 - \alpha\%$ t confidence interval for a random sample of size n . Check that your answer agrees with your answer in problem one.
3. Write a function which takes repeated random samples from some fixed finite population and which returns the median of each sample. Use your function to construct the histogram of 500 sample medians from some population you construct.