

C Project Plan—Random Number Generation

WHAT

The purpose of this project is to use different methods to generate random numbers and evaluate these methods.

My resources: internet

Supplementary software: SAS

textbook (C Primer Plus (5th Edition), Numerical Recipes in C (second edition), ch7 7.0-7.4)

WHY

Last semester when I took Mathematical Statistics, there was a section talking about once you get uniform random numbers, you can use them to obtain random numbers from other distributions. Therefore, uniform random numbers are the basic. Now I like to see those numbers physically generated by computer since I am learning C programming.

HOW

Step 1: Use mathematical knowledge to form iterative formulas.

Step 2: Build a generation function (1.get a number $0 \sim M$. 2.Divide this number by M).

Step 3: Every time you call the function producing a random number.

Step 4: Use loop to actualize a sequence of random numbers.

WHO

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