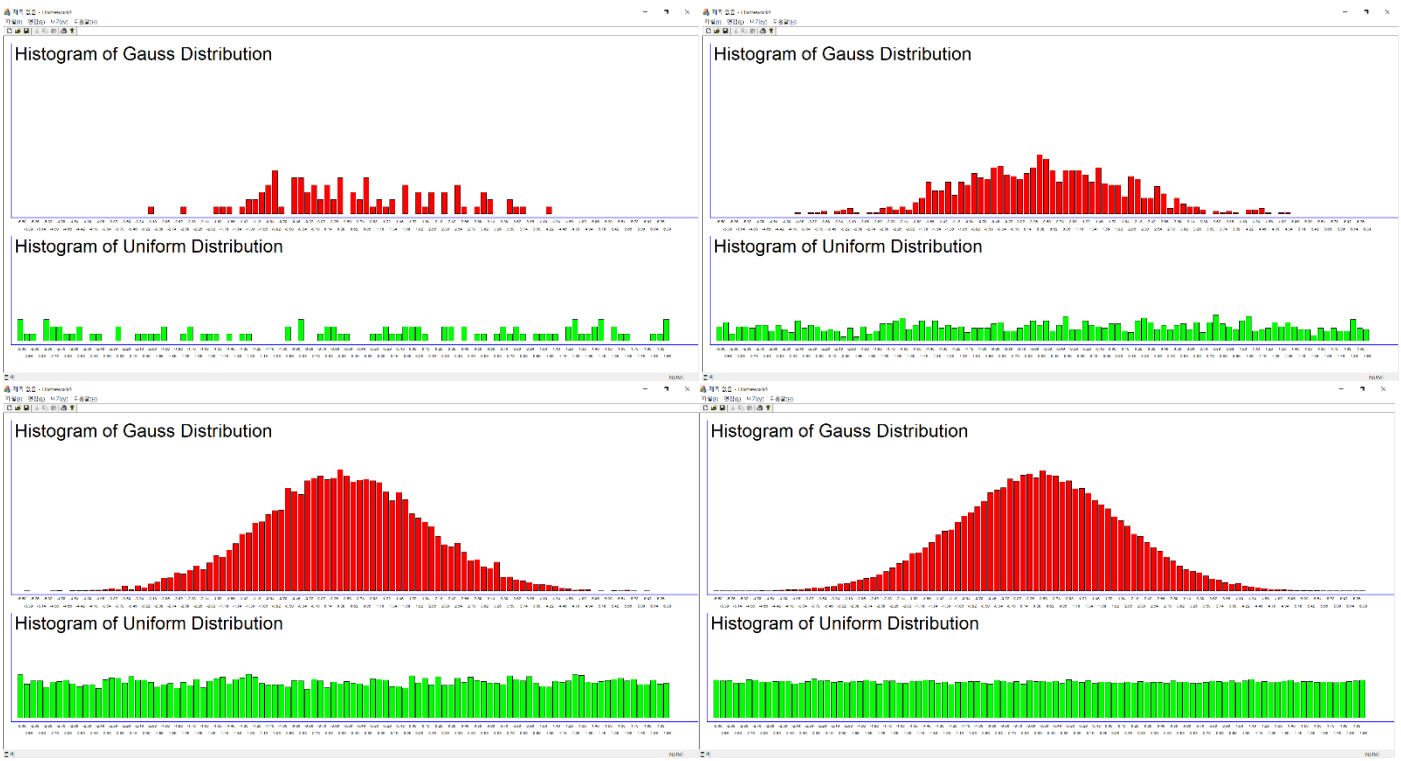

[Generating Gauss & Uniform Distribution with samples of 100, 1000, 10000, 10000 from left top to right bottom.]

1. Considering about Implementation

   A. Range of Gauss Distribution

      Gauss Dist. Has an infinite range of real number. In order to cover as many variables as I can, I set the range $[-4\sigma, 4\sigma]$, which include over 99.99% variables.

   B. Making A Histogram

      It is a tiny considering compared with 1-A that how can I express a histogram.

      Because a histogram that is made with a few of samples is tiny, so it is hard to find on screen.

      On the other hand, a histogram made with lots of samples is huge, so it is hard to read on screen.

      To go through this problem, I make an array to resize the histogram by increasing it if samples are small, otherwise decreasing.

   C. Showing Distributions using several samples.

      There are 8 cases of histogram that (Gauss, Uniform) * (four types of samples).

      I can not find the way how I can express several histogram on the screen at once and can get inputs from user. It is the my best that expressing 2 distributions about fixed sample at once.

2. Discussing the shape of the histograms in terms of the number of samples.

   A. Law of large numbers

      It is very spontaneous situation. The more trials I did, the more similar histogram I can get. It might not follow in small trials, but in the end of huge trial, it follow mathematical model.