**Laboratory work #2**

**Generation of signal with desired parameters**

**Goal of the work:**

Common need in DSP is to generate signals that resemble various types of random noise. This is required to test the performance of algorithms that must *work* in the presence of noise.

Main purpose of the work is obtaining normal distributed random signal from uniform distributed signal with the given parameters (

**Task 1:**

1. Using **rand** function Generate **normal distributed** discrete signal with parameters shown below. For generation of resulting signal add 12 random signals.
2. Show plot and histogram for signal itself and also plots and histograms for 12 signals. For Histogram use **hist** function.
3. Also, use second method for generatin of signal with given parameters (

**Note: Upload files of the tasks with a code and figures (It is desirable to have in one file and in pdf format)**