

## Term Project Probability & Statistics

1. Produce 100.000 random numbers ( $x$ ) with standard normal distribution and then plot its a small part ( Like 100 as a raw data and its histogram )
  2. Calculate the statistical parameter of  $x$ 
    - a. Mean( $x$ )
    - b. Std( $x$ )
    - c. Skewness( $x$ )
    - d. Kurtosis( $x$ )
  3. Using the data  $x$ , create a new data  $Y$  with unit mean value and 3 standard deviation, Plot its histogram
  4. Calculate the correlation coefficient between  $x$  &  $Y$  interpret the result
  5. If you want to change the skewness & the kurtosis, what will you do ?  
Give your recommendation.
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Note: Prepare this report in the format of IEEE.

Use its template:

Title	2. Methods
Names	3. Computer simulations
Abstract	4. Conclusion and Discussions
1.Introduction	5. References