First Assignment for BST 765

1. Choose a Method for Generating a Non-Normal Distribution (*F*).

PREEXISTING FUNCTION [e.g., SAS `RAND('CHISQUARE',4)`]

https://amadeus.co.uk/tips/why-is-the-rand-function-better-than-ranuni-and-rannor/

POLYNOMIAL METHOD (Fleishman or Headrick)

METHOD OF YOUR OWN – *t* as a Function of Normal & χ^2

(Using Known Relationship among Distributions)

2. Generate Data from a Non-Normal Distribution (*F*) of your choice using a Sample Size of 100,000.

3. Fully Describe Your Method for Generating the Data

(As You would See in a Methods Section in a Simulation Study)

4. Report the Expected Moments (Mean, Variance, Skew, Excess Kurtosis) of your Chosen Distribution.

5. Report the Observed Moments (Mean, Variance, Skew, Excess Kurtosis) of your Chosen Distribution.

6. Evaluate the Goodness of Fit of the Generated (Observed) Distribution with the Expected Distribution.