

## **MCA206: Statistics and Numerical Methods**

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### **Laboratory Assignment – 6**

Have you noted that every language compiler supports the random generation function (this is generally named as `rand ()`)? The basic method behind this function is Linear Congruential Method (LCM). Implement this method in R. You will have to learn about the basic parameters of this function, the inputs required for this implementation.

This is now important that the numbers generated by your function are really random. The Chi-square method is generally used for this purpose to establish that the numbers generated are random.

Implement the Chi-Square method and then establish that your function really generates random numbers, you will have to generate a large sequence (say, 10,000 or even 1,00,000) of random numbers to establish this.