Computing and Data Science

Simulations

Assignment no. 5 (Continuous Distributions)

3rd Year

ID: 20221449583

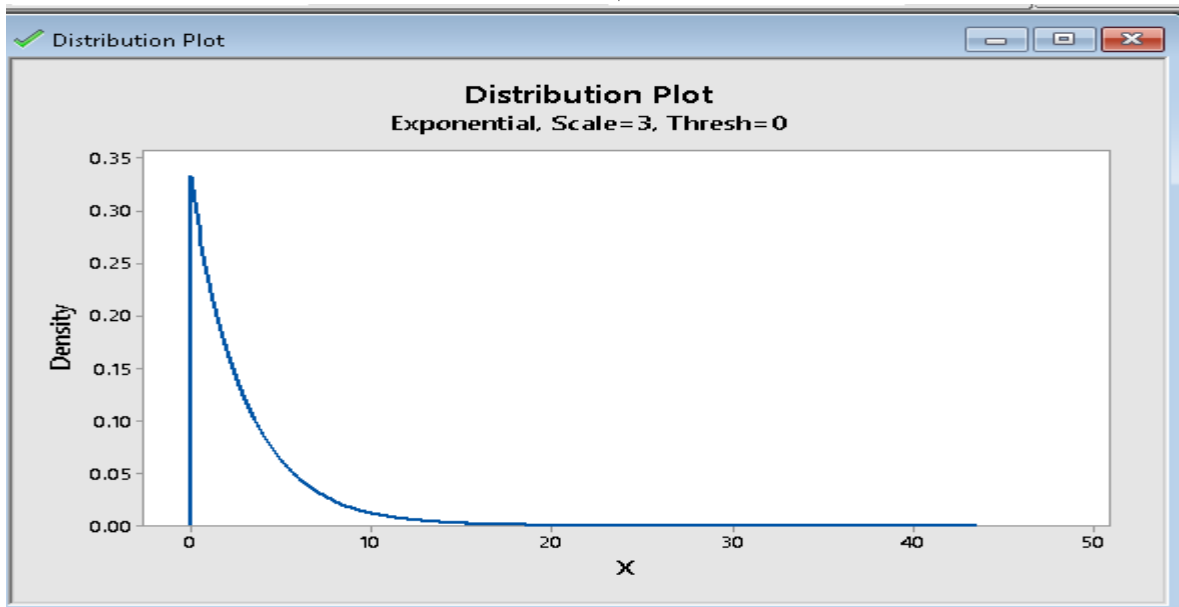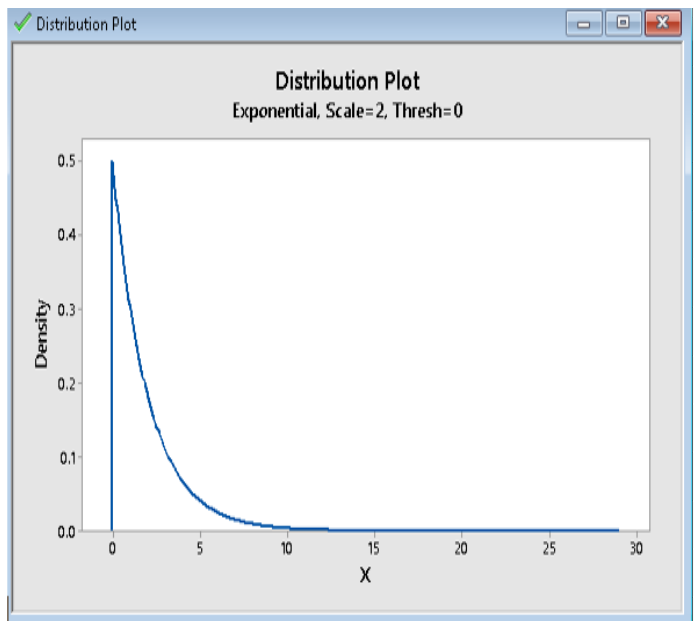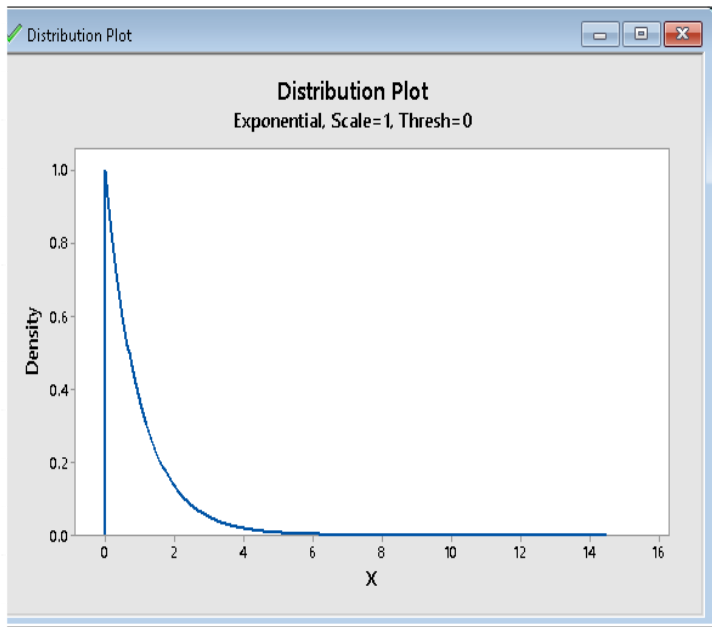**Name: Ali Mohamed Sayed Ahmed**

Eng.Mohamed Hatem

Dr. Emad Rauf

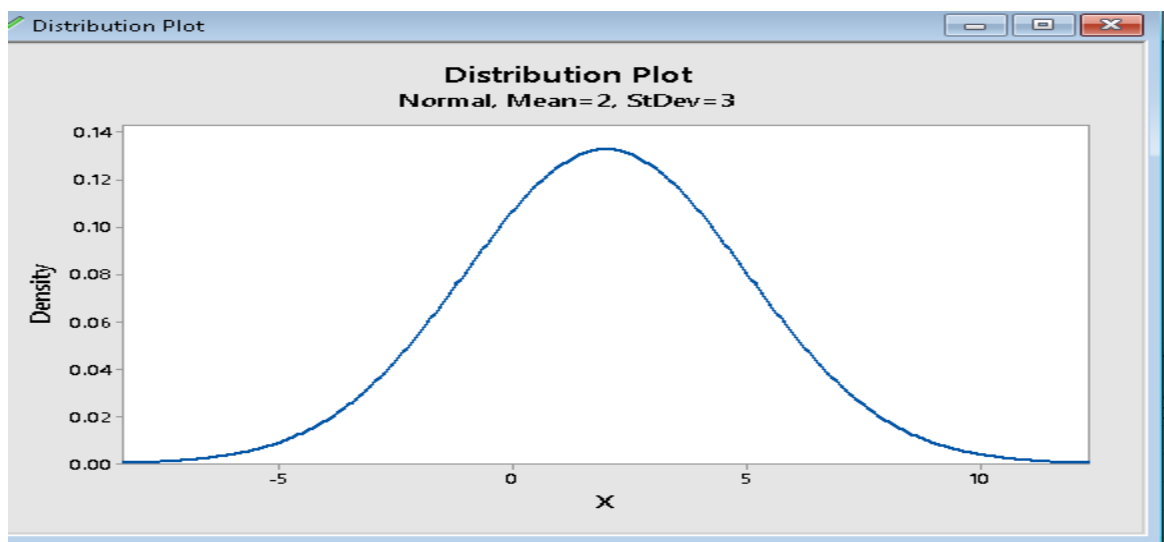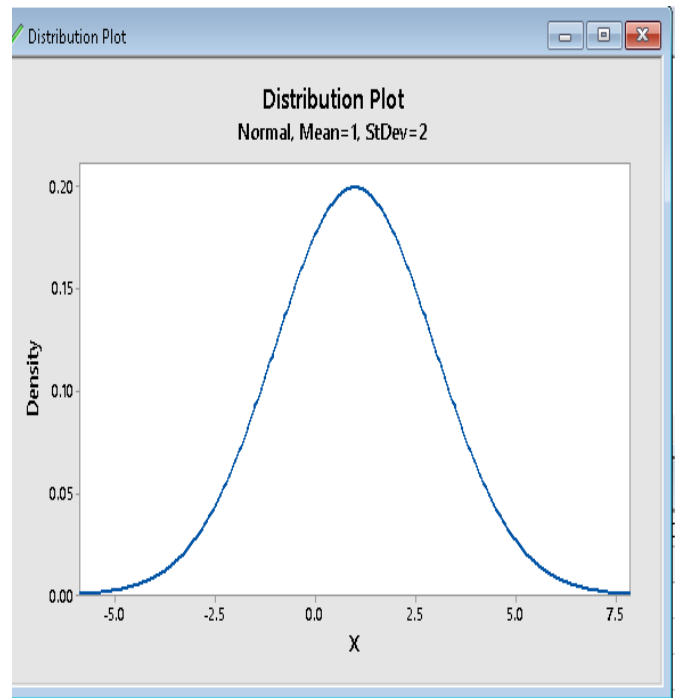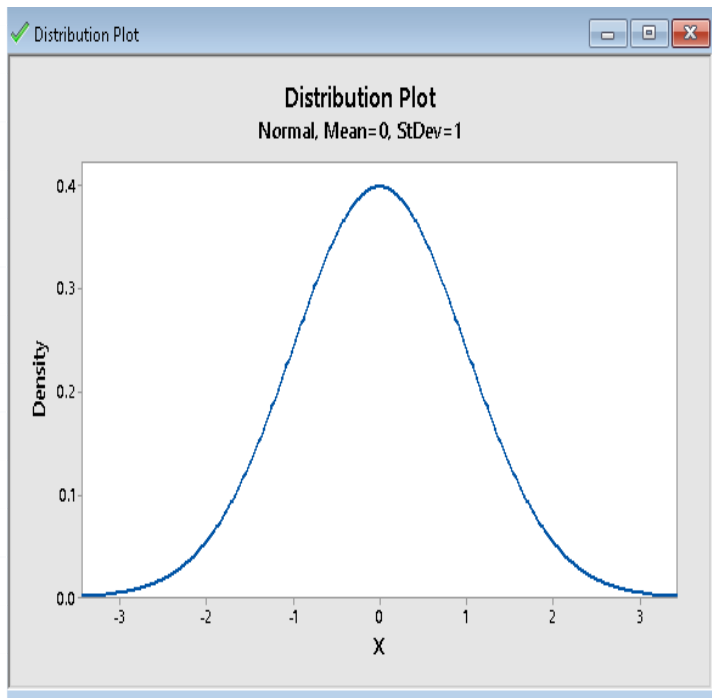# 1. Exponential Distribution:

- **Steps:**
  - Enter data
  - Select graph
  - Select probability distribution plot
  - Exponential
  - Put scale = 1 & scale = 2 & scale = 3

Distribution Plot
Exponential, Scale=1, Thresh=0

Distribution Plot
Exponential, Scale=2, Thresh=0

Distribution Plot
Exponential, Scale=3, Thresh=0
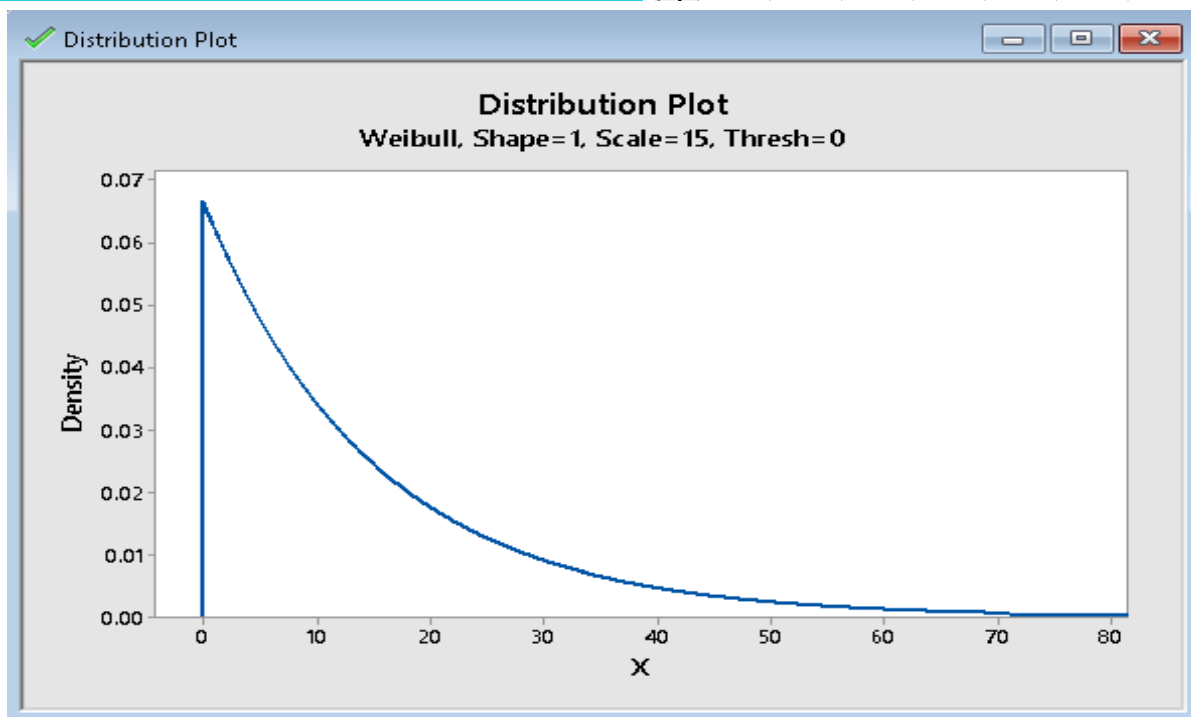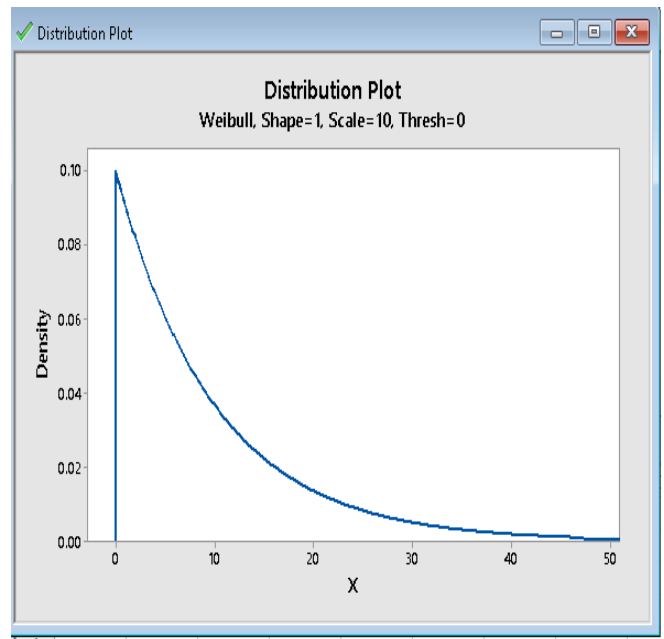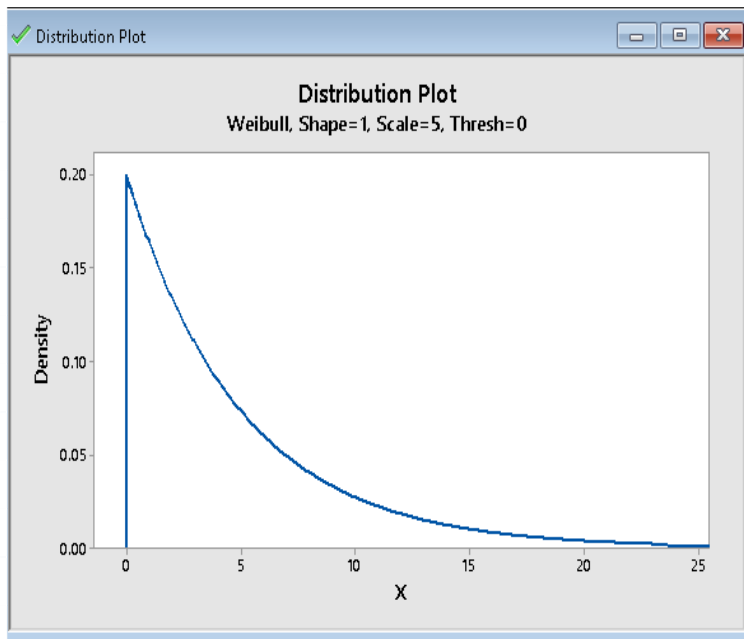
2. Normal distribution:
- Steps:
    - Enter data
    - Select graph
    - Select probability distribution plot
    - normal
    - Graph 1 by mean = 0 & std = 1
    - Graph 2 by mean = 1 & std = 2
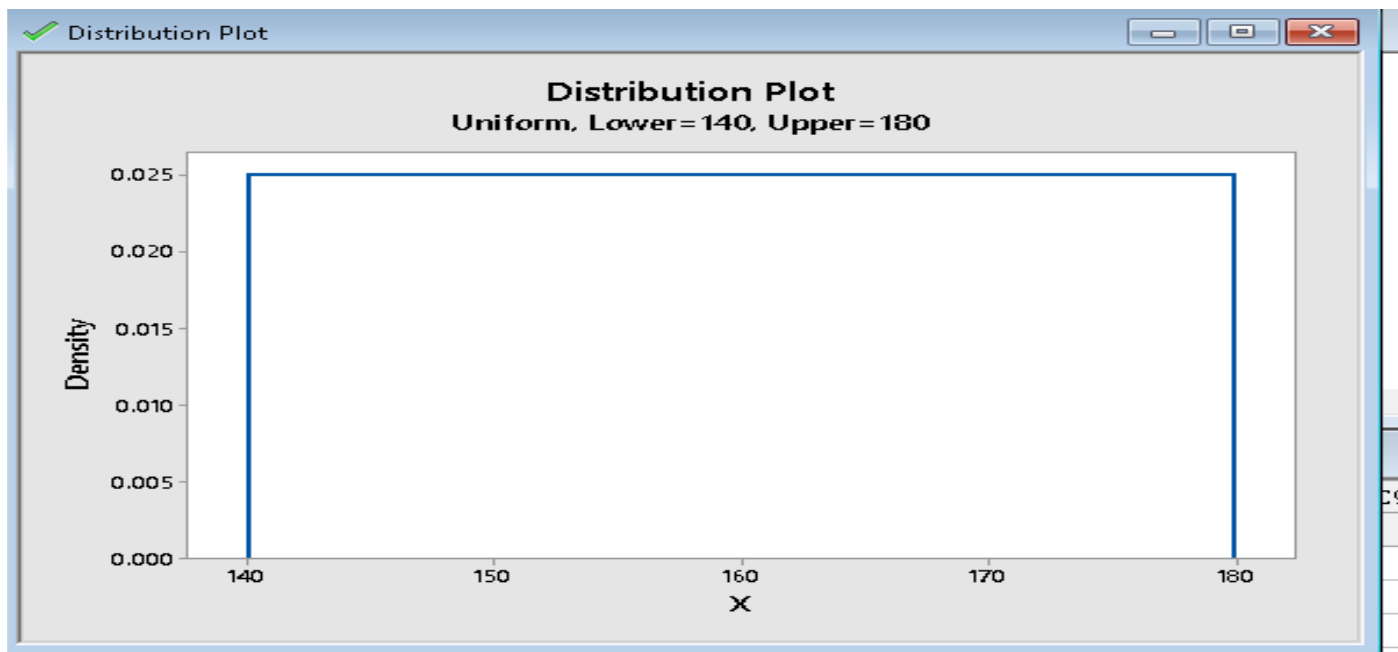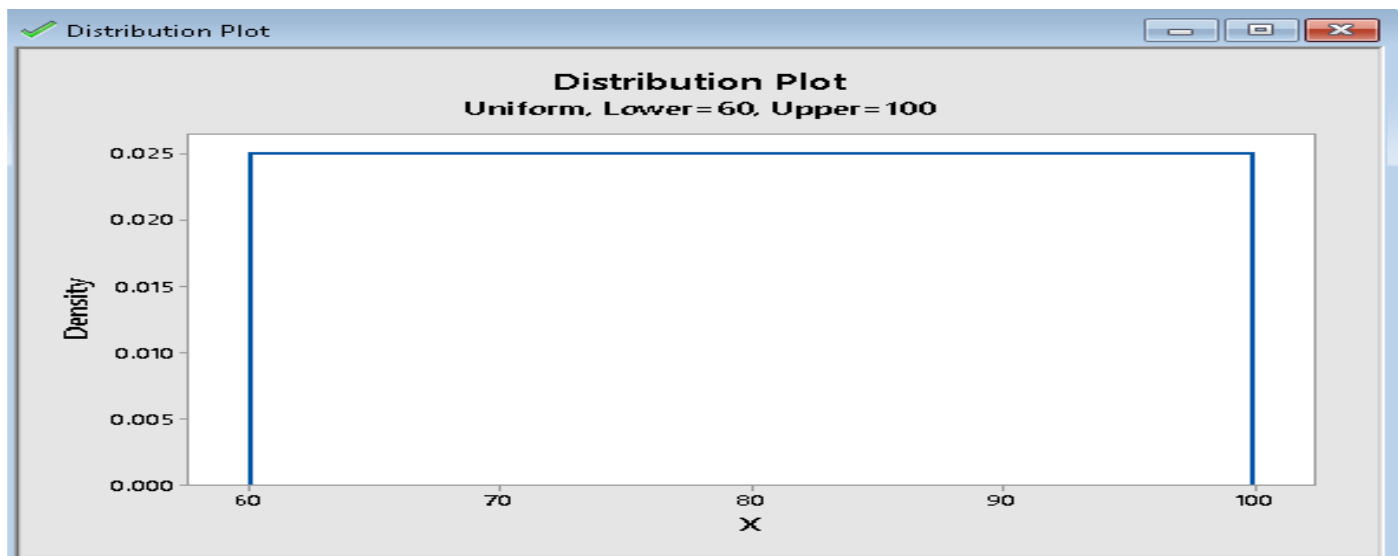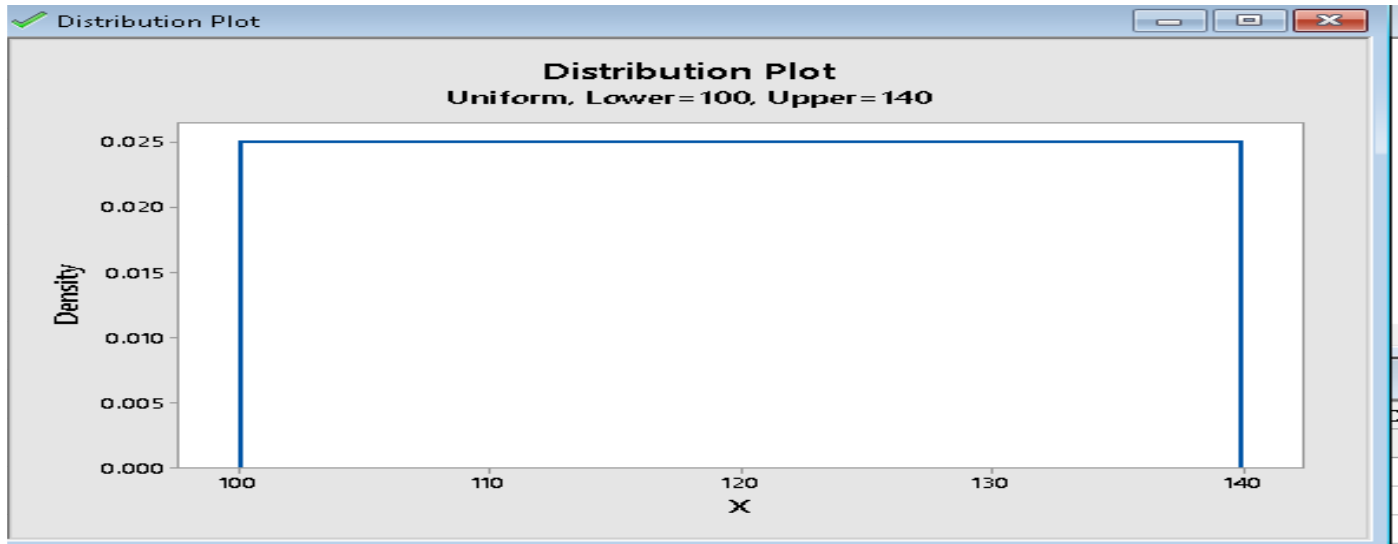   - Graph 3 by mean = 2 & std = 3

3. Weibull Distribution:
- Steps:
  - Enter data
  - Select graph
  - Select probability distribution plot
  - Weibull Distribution
  - Graph 1 by shape = 1 & scale = 5
  - Graph 2 by shape = 1 & scale = 10
  - Graph 3 by shape = 1 & scale = 15

4. Uniform:

Distribution Plot
Uniform, Lower = 100, Upper = 140

Distribution Plot
Uniform, Lower = 60, Upper = 100

Distribution Plot
Uniform, Lower = 140, Upper = 180

5. Erlang Distribution:

Distribution Plot
Chi-Square, df=2

Distribution Plot
Chi-Square, df=5

Distribution Plot
Chi-Square, df=7