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Lab One

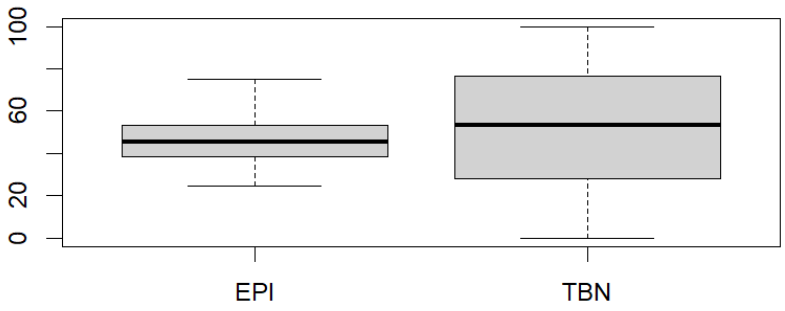
Chosen Variables:

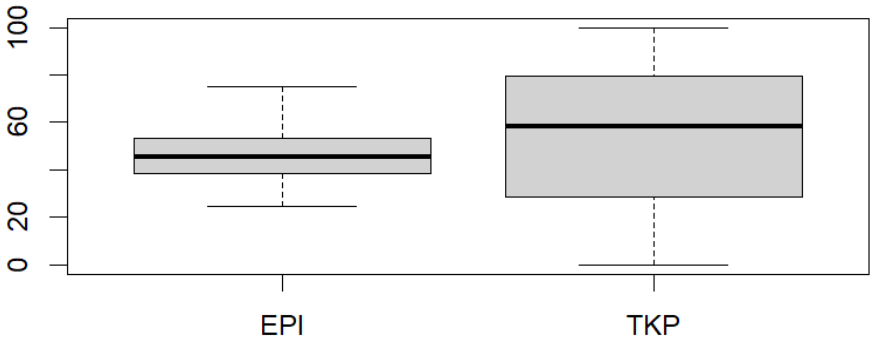
- TBN.new, TKP.new

Variable summaries:

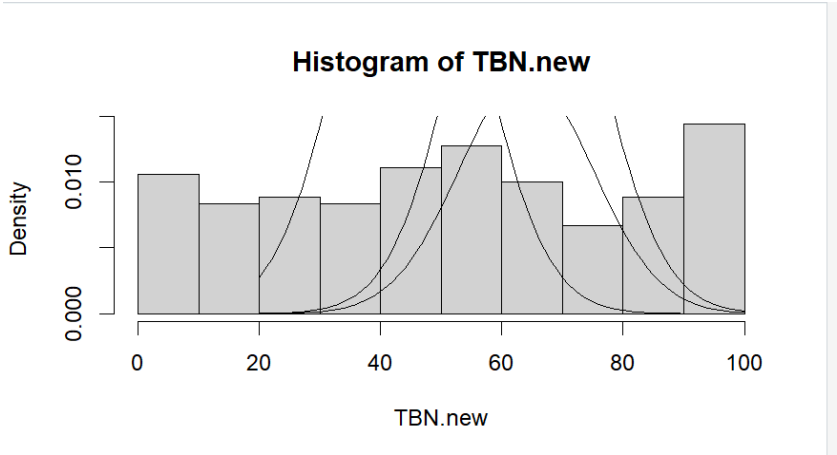
- TBN.new:
  - Min. 1st Qu. Median Mean 3rd Qu. Max.
  - 0.00 27.88 53.25 52.04 76.62 100.00
- TKP.new:
  - Min. 1st Qu. Median Mean 3rd Qu. Max.
  - 0.00 28.68 58.25 53.60 79.53 100.00

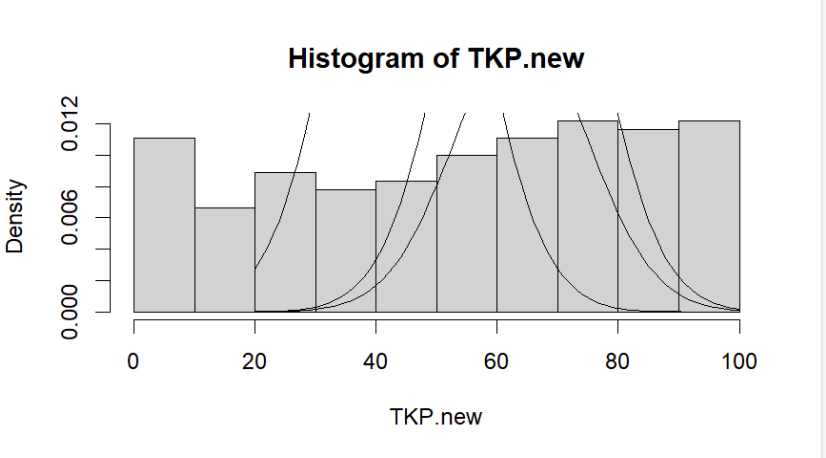
Variable boxplots:

- TBN.new:
  - 

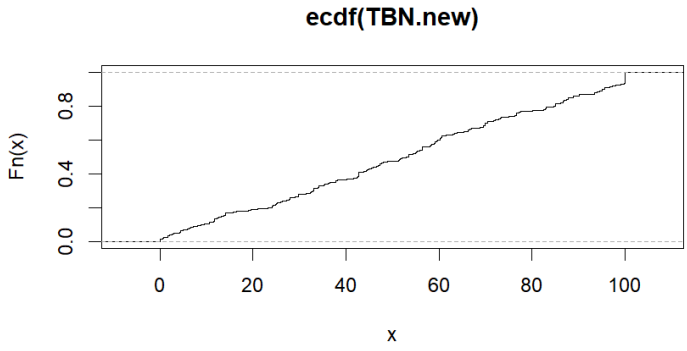
- TKP.new:
  - 

Histograms with overlayed theoretical probability distributions:

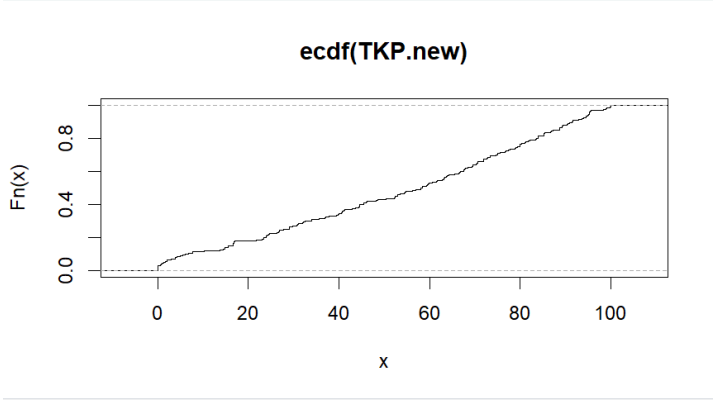
- TBN.new:
  - 

- TKP.new:
  - 

ECDF plots:

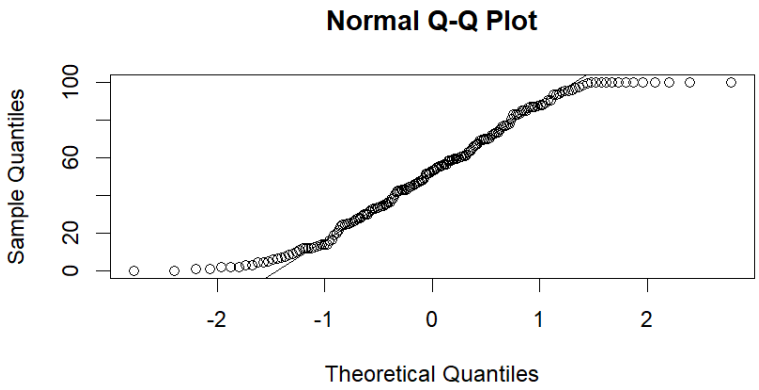
- TBN.new:
  - 

- TKP.new:

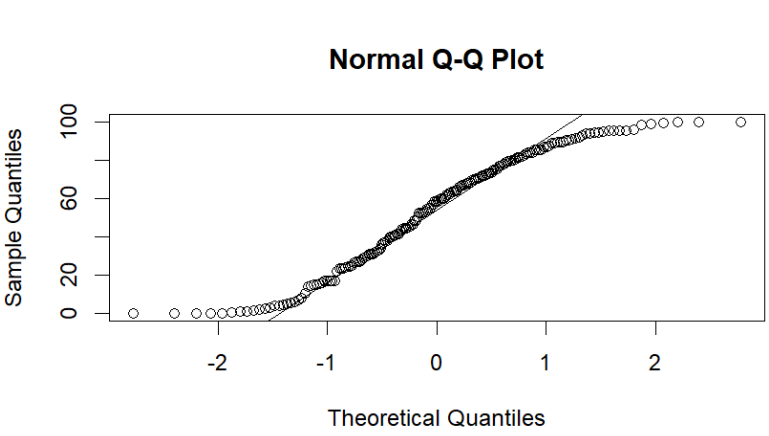


QQ plots of each variable against the normal distribution:

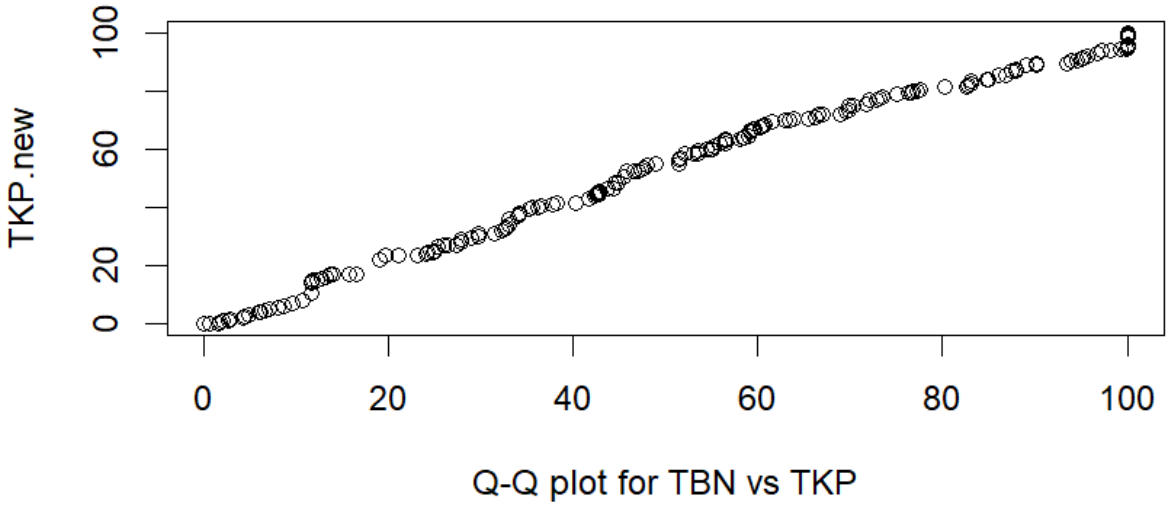
- TBN.new:



- TKP.new:



QQ plot of the 2 variables against each other:



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Normality statistical tests for each variable:

- TBN.new:
  - Shapiro:
    - W = 0.95364, p-value = 1.241e-05
  - AD:
    - A = 1.6855, p-value = 0.0002445
- TKP.new:
  - Shapiro:
    - W = 0.94455, p-value = 1.863e-06
  - AD:
    - A = 2.5828, p-value = 1.532e-06

Statistical test for the variables having identical distributions:

- KS-Test:
  - data: TBN.new and TKP.new
  - D = 0.094444, p-value = 0.3983
  - alternative hypothesis: two-sided
- Wilcox test:
  - data: TBN.new and TKP.new
  - W = 15717, p-value = 0.625
  - alternative hypothesis: true location shift is not equal to 0