Distributions-in-R

Ankit Borkhataria

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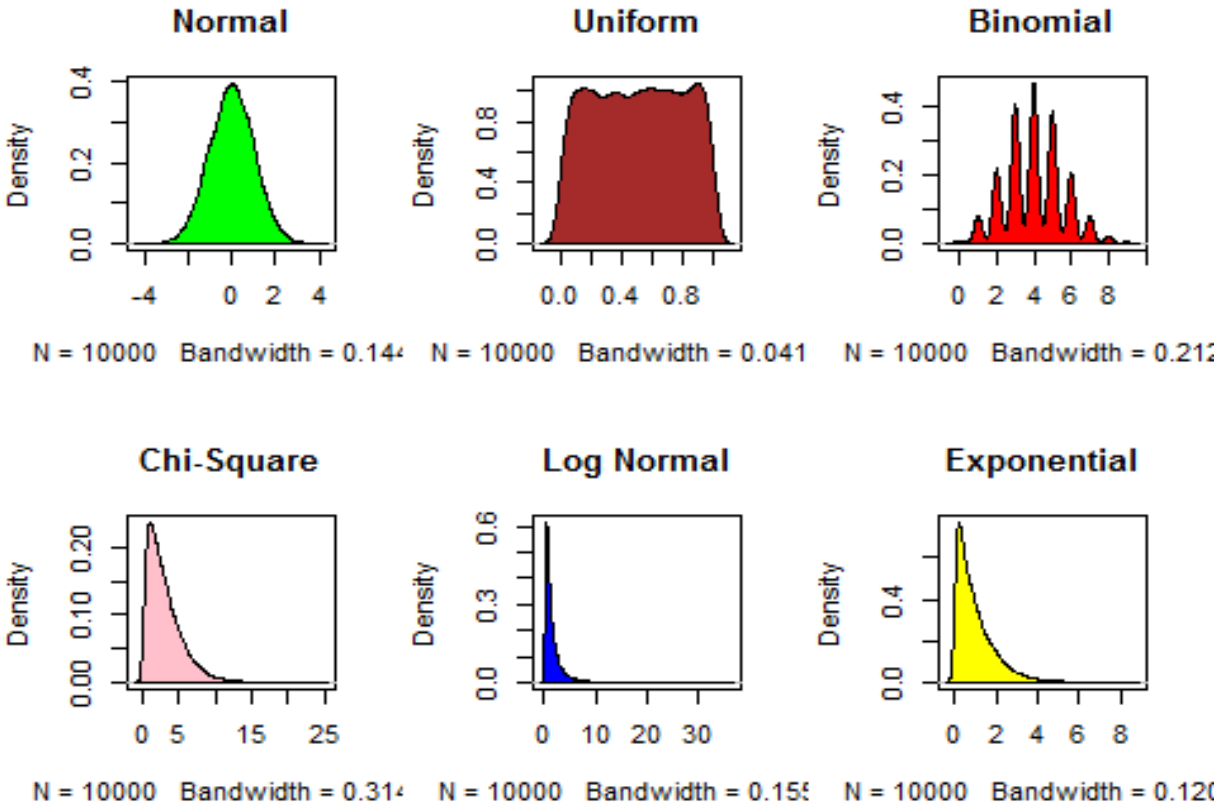
```
distributionPlots = function()

{
  opar = par()
  par(mfrow=c(2,3))

  xnorm = rnorm(10000) #Gaussian or Normal
  plot(density(xnorm),main="Normal")
  polygon(density(xnorm),col="green")

  xnorm = runif(10000, min = 0, max = 1) #Uniform
  plot(density(xnorm),main="Uniform")
  polygon(density(xnorm),col="Brown")

  xnorm = rbinom(10000, size = 10, prob = 0.4) #Binomial
  plot(density(xnorm),main="Binomial")
  polygon(density(xnorm),col="Red")

  xnorm = rchisq(10000, df = 3) #Pearson or Chi-Square
  plot(density(xnorm),main="Chi-Square")
  polygon(density(xnorm),col="Pink")

  xnorm = rlnorm(10000, meanlog=0, sdlog=1) #lognormal
  plot(density(xnorm),main="Log Normal")
  polygon(density(xnorm),col="Blue")

  xnorm = rexp(10000, rate=1) #exponential
  plot(density(xnorm),main="Exponential")
  polygon(density(xnorm),col="Yellow")

  return()
}

distributionPlots()
```


Normal
Density
0.0
0.2
0.4
-4
0
2
4
N = 10000 Bandwidth = 0.14
Uniform
Density
0.0
0.4
0.8
0.0
0.4
0.8
N = 10000 Bandwidth = 0.041
Binomial
Density
0.0
0.2
0.4
0
2
4
6
8
N = 10000 Bandwidth = 0.212
Chi-Square
Density
0.00
0.10
0.20
0
5
15
25
N = 10000 Bandwidth = 0.31
Log Normal
Density
0.0
0.3
0.6
0
10
20
30
N = 10000 Bandwidth = 0.15
Exponential
Density
0.0
0.4
0
2
4
6
8
N = 10000 Bandwidth = 0.120

```
## NULL
```