Generating Random Data

- Built-in statistical distribution functions

  R has several built-in statistical distributions. For each distribution four functions are available,

  - r : random number generator
  - d : density function
  - p : cumulative distribution function
  - q : quantile function

  Each latter can be added as a prefix to any of the R distribution names below.

Distribution	R Name	Additional Arguments
binomial	binom	size, prob
chi-squared	chisq	df
exponential	exp	rate
F	f	df1, df2
normal	norm	mean, sd
Poisson	pois	lambda
Student's t	t	df
uniform	unif	min, max

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```
> dnorm(1.96, mean=0, sd=1)
[1] 0.05844094
> dnorm(1.96)
[1] 0.05844094
> pnorm(1.96, mean=0, sd=1)
[1] 0.9750021
> pnorm(1.96, mean=0, sd=1, lower.tail=FALSE)
[1] 0.0249979
> qnorm(0.975, 0, 1)
[1] 1.959964
> rnorm(5, mean=2, sd=1)
[1] 4.5283366 2.5490967 2.2382129 0.9511069 3.2947633
```