Distribuciones Discretas

Nombre		Densidad	Parámetros	Media	Varianza	Generadora de momentos
Uniforme discreta	*UD(θ)*	$f(x;\theta) = \frac{1}{\theta} I_{\{1,2,\ldots,\theta\}}(x)$	$\theta = 1, 2, \ldots$	$\frac{\theta+1}{2}$	$\frac{\theta^2-1}{12}$	$\sum_{j=1}^{\theta} \frac{1}{\theta} e^{jt}$
Bernoulli	*Ber(θ)*	$f(x;\theta) = \theta^x (1-\theta)^{1-x} I_{\{0,1\}}(x)$	$0 \le \theta \le 1$	θ	$\theta(1-\theta)$	$(1-\theta) + \theta e^t$
Binomial	*Bin(n, θ)*	$f(x;n,\theta) = \binom{n}{x} \theta^x (1-\theta)^{n-x} I_{\{0,1,\ldots,n\}}(x)$	$0 \le \theta \le 1$ $n = 1, 2, \ldots$	$n\theta$	$n\theta(1-\theta)$	$\left((1-\theta) + \theta e^t\right)^n$
Geométrica	*Geo(θ)*	$f(x;\theta) = \theta(1-\theta)^x I_{\{0,1,\ldots\}}(x)$	$0 \le \theta \le 1$	$\frac{1-\theta}{\theta}$	$\frac{1-\theta}{\theta^2}$	$\frac{\theta}{1-(1-\theta)e^t}$
Binomial Negativa	*BN(r, θ)*	$f(x;r,\theta) = \binom{r+x-1}{x} \theta^r (1-\theta)^x I_{\{0,1,\ldots\}}(x)$	$0 \le \theta \le 1$ $r > 0$	$\frac{r(1-\theta)}{\theta}$	$\frac{r(1-\theta)}{\theta^2}$	$\left(\frac{\theta}{1-(1-\theta)e^t}\right)^r$
Poisson	*Poi(θ)*	$f(x;\theta) = \frac{e^{-\theta}\theta^x}{x!} I_{\{0,1,\ldots\}}(x)$	$\theta > 0$	θ	θ	$e^{\theta(e^t-1)}$