

Ejemplo Loglineal de tabla con 3 entradas

```
> berk.data
```

	Admit	Gender	Dept	Freq				
					13	Admitted	Male	D 138
1	Admitted	Male	A	512	14	Rejected	Male	D 279
2	Rejected	Male	A	313	15	Admitted	Female	D 131
3	Admitted	Female	A	89	16	Rejected	Female	D 244
4	Rejected	Female	A	19	17	Admitted	Male	E 53
5	Admitted	Male	B	353	18	Rejected	Male	E 138
6	Rejected	Male	B	207	19	Admitted	Female	E 94
7	Admitted	Female	B	17	20	Rejected	Female	E 299
8	Rejected	Female	B	8	21	Admitted	Male	F 22
9	Admitted	Male	C	120	22	Rejected	Male	F 351
10	Rejected	Male	C	205	23	Admitted	Female	F 24
11	Admitted	Female	C	202	24	Rejected	Female	F 317
12	Rejected	Female	C	391				

MODELO INDEPENDENCIA MUTUA

```
> berk.ind<-glm(Freq~Admit+Gender+Dept, family=poisson())
> berk.ind$deviance
[1] 2097.671
> ### via glm()
```

MODELO SATURADO

```
> berk.sat<-glm(Freq~Admit*Gender*Dept, family=poisson())
> berk.sat$deviance
[1] 1.119105e-13
```

MODELO INDEPENDENCIA CONJUNTA DE GENDER Y DEPT CON ADMIT

```
> #join
> berk.join=glm(Freq~Admit+Gender+Dept+Gender*Dept, family=poisson())
> berk.join$deviance
[1] 877.0564
```

MODELO INDEPENDENCIA CONDICIONAL DE DEPT Y ADMIT DADO GENDER

```
> #conditional
> berk.cind=glm(Freq~Admit+Gender+Dept+Gender*Dept+Gender*Admit, family=poisson())
> berk.cind$deviance
[1] 783.607
```

MODELO DE ASOCIACIÓN HOMOGÉNEA

```
> berk.hom=glm(Freq~Admit+Gender+Dept+Gender*Dept+Gender*Admit+Admit*Dept, family=poisson())
> berk.hom$deviance
[1] 20.20428
```

```
> anova(berk.cind,berk.hom,berk.sat)
Analysis of Deviance Table
```

```
Model 1: Freq ~ Admit + Gender + Dept + Gender * Dept + Gender * Admit
Model 2: Freq ~ Admit + Gender + Dept + Gender * Dept + Gender * Admit +
  Admit * Dept
Model 3: Freq ~ Admit * Gender * Dept
Resid. Df Resid. Dev Df Deviance
1      10      783.61
2       5       20.20  5      763.4
3       0        0.00  5       20.2
>
```