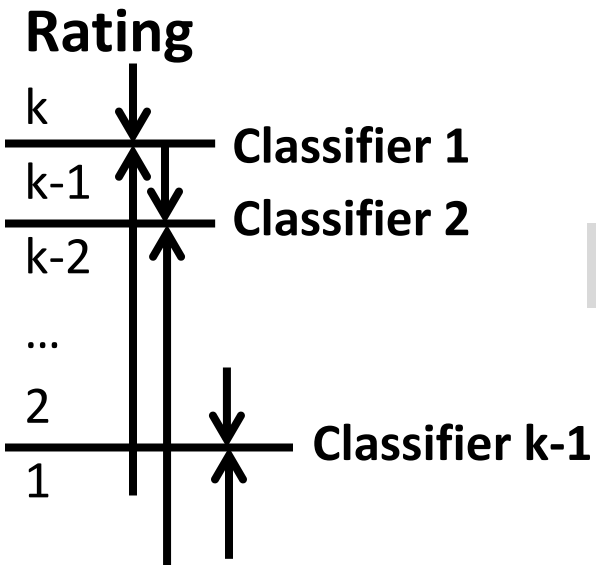
Problems with k-1 Independent Classifiers?

$$\log\frac{p(Y_j=1\mid X)}{p(Y_j=0\mid X)}=\log\frac{p(r\geq j\mid X)}{1-p(r\geq j\mid X)}=\alpha_j+\sum_{i=1}^{M}x_i\beta_{ji}\qquad \beta_{ji}\in\Re$$



$$p(r\geq j\mid X)=\frac{e^{\alpha_j+\sum_{i=1}^{M}x_i\beta_{ji}}}{e^{\alpha_j+\sum_{i=1}^{M}x_i\beta_{ji}}+1}$$

How many parameters are there in total? **(k-1)*(M+1)**

The k-1 classification problems are dependent.
The positive/negative features tend to be similar!