

$$\begin{bmatrix} y \\ 2.1 \\ 1.8 \\ 2.2 \\ 1.9 \\ 3.5 \\ 3.2 \\ 3.4 \\ 3.1 \\ 2.9 \\ 3.1 \\ 2.8 \\ 3.2 \\ 4.2 \\ 3.8 \\ 4.1 \\ 3.9 \end{bmatrix} = \begin{bmatrix} \text{Int} & c1 & c2 & c3 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 \\ 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 \end{bmatrix} \begin{bmatrix} b_0 \\ b_1 \\ b_2 \\ b_3 \end{bmatrix} \begin{matrix} \longrightarrow \text{HR} \\ \longrightarrow \text{Sales} \\ \longrightarrow \text{Eng} \\ \longrightarrow \text{Mkt} \end{matrix}$$

HR has all 0s  
(reference group)

Each other group  
has exactly one 1