

$$H \quad = \quad \theta_{\textcolor{red}{1}}P_{\textcolor{red}{1}} \quad + \quad \theta_{\textcolor{blue}{2}}P_{\textcolor{blue}{2}} \quad + \quad \theta_{\textcolor{red}{3}}P_{\textcolor{red}{3}} \quad + \quad \cdots \quad + \quad \theta_{\textcolor{green}{r}}P_{\textcolor{green}{r}}$$

$$\alpha \quad = \quad \alpha_{\textcolor{red}{1}} = 3 \quad , \quad \alpha_{\textcolor{blue}{2}} = 0 \quad , \quad \alpha_{\textcolor{red}{3}} = 2 \quad , \quad \dots \quad , \quad \alpha_{\textcolor{green}{r}} = 1$$



$$S \quad = \quad s_1 = \textcolor{red}{1} \quad , \quad s_2 = \textcolor{red}{1} \quad , \quad s_3 = \textcolor{red}{1} \quad , \quad s_4 = \textcolor{red}{3} \quad , \quad s_5 = \textcolor{red}{3} \quad , \quad \dots \quad , \quad s_m = \textcolor{green}{r}$$