$$S_{10} = 1$$
 $\begin{vmatrix} S_{10} & = 1 \\ S_{9} & = 1 \end{vmatrix}$
 $S_{8} = 2$
 $\begin{vmatrix} S_{7} & = 2 \\ S_{6} & = 3 \end{vmatrix}$
 $\begin{vmatrix} S_{5} & = 3 \\ S_{4} & = 3 \end{vmatrix}$
 $\begin{vmatrix} S_{3} & = 2 \end{vmatrix}$