

$$\begin{array}{ccc}
 f_1(x_1) \oplus f_2(x_1) & & \\
 \vdots & \xrightarrow{\text{Lagrange interpolation}} & s_j \oplus d_j \\
 f_1(x_n) \oplus f_2(x_n) & & 
 \end{array}$$