$$
\left(\begin{array}{ccc|ccc|ccc}
4 & -1 & 0 & -1 & 0 & 0 & & & \\
-1 & 4 & -1 & 0 & -1 & 0 & & 0 & \\
0 & -1 & 4 & 0 & 0 & -1 & & & \\
\hline
-1 & 0 & 0 & 4 & -1 & 0 & -1 & 0 & 0 \\
0 & -1 & 0 & -1 & 4 & -1 & 0 & -1 & 0 \\
0 & 0 & -1 & 0 & -1 & 4 & 0 & 0 & -1 \\
\hline
 & & & -1 & 0 & 0 & 4 & -1 & 0 \\
 & 0 & & 0 & -1 & 0 & -1 & 4 & -1 \\
 & & & 0 & 0 & -1 & 0 & -1 & 4
\end{array}\right)
\begin{pmatrix} u_{1,1} \\ u_{2,1} \\ u_{3,1} \\ u_{1,2} \\ u_{2,2} \\ u_{3,2} \\ u_{1,3} \\ u_{2,3} \\ u_{3,3} \end{pmatrix}
=
\begin{pmatrix}
g(0,\frac{1}{4}) + g(\frac{1}{4},0) + h^2 f(x_1,y_1) \\
g(\frac{1}{2},0) + h^2 f(x_2,y_1) \\
g(1,\frac{1}{4}) + g(\frac{3}{4},0) + h^2 f(x_3,y_1) \\
g(0,\frac{1}{2}) + h^2 f(x_1,y_2) \\
h^2 f(x_2,y_2) \\
g(1,\frac{1}{2}) + h^2 f(x_3,y_2) \\
g(0,\frac{3}{4}) + g(\frac{1}{4},1) + h^2 f(x_1,y_3) \\
g(\frac{1}{2},1) + h^2 f(x_2,y_3) \\
g(1,\frac{3}{4}) + g(\frac{3}{4},1) + h^2 f(x_3,y_3)
\end{pmatrix}
$$