$$
\begin{aligned}
y_1 &= y_i + k_1\,(\frac{1}{2}\,dt) \\
y_2 &= y_i + k_2\,(\frac{1}{2}\,dt) \\
y_3 &= y_i + k_3\,dt \\
y_{i+1} &= y_i + \frac{1}{6}(k_1 + 2k_2 + 2k_3 + k_4)\,dt
\end{aligned}
$$