Adams-Bashforth-Moulton Method

Another popular fourth-order predictor-corrector method is the Bashforth-Moulton multistep method. The predictor formula is the Adams-Bashforth-Moulton multistep method. The predictor formula is the Adams-Bashforth predictor and is given by

$$y_{i+1} = y_i + \frac{h}{24}\left(55f_i - 59f_{i-1} + 37f_{i-2} - 9f_{i-3}\right)$$

The corrector formula is known as Adams-Moulton corrector and given by

$$y_{i+1} = y_i + \frac{h}{24}\left(f_{i-2} - 5f_{i-1} + 19f_i + 9f_{i+1}\right)$$

This pair of equations can be implemented using the procedure for Milne-Simpson method.