

Implicit block hybrid-like method for solving system of first order ordinary differential equations

ABSTRACT

The block hybrid-like method is presented and implemented in predictor-corrector mode to solve system of first order ordinary differential equations. The block method is applied to provide the approximation for both the main and off-step points concurrently. The stability properties of the method are investigated. Some illustrative examples are presented to demonstrate the efficiency of the block hybrid-like method.

Keyword: Implicit; Block; Off-step point; Ordinary differential equations