Abstract

By solving many applied problems we collide with the solution of Volterra type integral equations. Volterra integral equations are investigated long ago, however up to now there hasn't been constructed an effective method to find numerical solution of nonlinear Volterra integral equation. Therefore, different methods are suggested for approximate solution of nonlinear Volterrs type integral equation. One of the popular methods of numerical solution of such equations is replacement of an integral by a quadrature formula. To improve such methods some authors suggested to use quadrature formulae with regard to Runge-Kutta or Adams methods. Unlike these methods here we suggest to use multistep methods for finding numerical solution of nonlinear Volterra type integral equations and give a method to determine the coefficients of the suggested method