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We developed a very effective non-stationary extension to the classical stationary Jacobi iteration for solving system of linear equation iteratively. The idea is that, for saving time, we will keep the value of the "good" components until they "should" be re-evaluated. The experiment using well-known data set confirms the lower computing effort per iteration. Moreover, the total number of the iterations using our method is lower than using classical Jacobi and can be compared with the classical Jacobi. Hence, the our method, the highest performance, reduces both the number of iterations and the computational effort per iteration. (Received March 07, 2006)