

```
function x = jacobi(A, b, x0, tol, maxiter)
n = length(b);
x = zeros(n, 1);
k = 1;
while k <= maxiter
    for i = 1:n
        x(i) = (1/A(i, i))*(b(i)-dot(A(i, 1:i-1), x0(1:i-1))-dot(A(i, i+1:n), x0(i+1:n)));
    end
    fprintf(['x: ' repmat(' %0.10f ',1,numel(x)) '\n'],x);
    if (norm(x-x0, inf) < tol)
        return;
    end

    k=k+1;
    x0 = x;
end
fprintf("%s", "Not successful.")
return;
```