```
function [x, iterno, isconv, error]=Jacobi_iter(A, b, x0, tol,
 itermax)
x = 0;
[n,~] = size(A);
for i = 1:n
    a = 0;
    for j = 1:n
        if j~=i
            a = a + abs(A(i,j));
        end
    end
    if abs(A(i,i)) >= a
        x = 1;
    else
        x=0;
        break;
    end
end
y = x;
x1 = x0;
iter = 0;
err = 0;
while iter<itermax
    for i = 1:n
        a = 0;
        for j = 1:n
            if j==i
                continue
            end
            a = a + A(i,j)*x0(j);
        end
        x1(i) = (b(i) - a)/A(i,i);
    end
    iter = iter +1;
    no0 = sqrt(sum((x1 - x0).^2));
    no1 = sqrt(sum(x0.^2));
    err = abs(no0/no1);
    if err<=tol
        break
    end
    x0 = x1;
end
isconv = y;
x = x1;
iterno = iter;
error = err;
end
```

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