
```
% 2)
% part 2
function hw4_q2

N = [10,100,500,1000];

tot_it = 100;
i = 1;

for n=N
    %Generate Linear System
    [A,b] = generate_SPD_mat_and_rhs_vec(n);

    %Compute Solution
    x_jacobi = my_jacobi(A,b,tot_it);

    %"True" Solution
    x_t = A\b;

    %Errors
    err_jacobi(i) = norm(x_t - x_jacobi);
    i = i + 1;
end
T1 = table;
    T1.N = N';
    T1.error_jacobi = err_jacobi'
end
```

T1 =

<i>N</i>	<i>error_jacobi</i>
10	0.279176355129764
100	88.5636183496535
500	489.163740944799
1000	989.304156432798

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