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Y = xlsread('kron.xlsx');
nbus = length(Y);
n = nbus;
Y_new = zeros(nbus,nbus);
p = 1;
i = 1;
while( p< n )
for j = 1:nbus
    for k = 1:nbus
        if j==i || k==i
            Y_new(j,k) = 0;
        else
            Y_new(j,k) = Y(j,k) - ( (Y(j,i)*Y(i,k))/Y(i,i));
        end
    end
end
fprintf('%dth bus reduction \n',p);
Y_new(:,i) = [];
Y_new(i,:) = [];
Y = Y_new;
nbus = nbus - 1;
p = p + 1;
disp(Y_new);
end

```

1th bus reduction

-11.0075	4.2537	6.7537
4.2537	-5.4269	0.3731
6.7537	0.3731	-7.9269

2th bus reduction

-3.7831	2.9831
2.9831	-3.7831

3th bus reduction

-1.4308
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