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>> %to form Zbus for given power system by step by step algorithm%
>> %Name :- om karrahe%
>> %Subject name :- CAPS (practical)%
>> Zbus=zeros(3,3);
>> Zbus(1,1)=0.4;
>> for k=1:2
p=1;q=2;
Zbus(q,k)=Zbus(p,k);
Zbus(k,q)=Zbus(q,k);
Zbus(q,q)=Zbus(p,k)+0.5;
end
>> for k=1:2
q=2;
Zbus(3,k)=-Zbus(q,k);
Zbus(k,3)=Zbus(3,k);
Zbus(3,3)=-Zbus(q,3)+0.4;
end
>> for k=1:2
for m=1:2
Zbus(k,m)=Zbus(k,m)-((Zbus(3,k)*Zbus(3,m)))/Zbus(3,3);
end
end
>> Zbus=Zbus(:,1:2);
>> Zbus=Zbus(1:2,:);
>> Zbus

Zbus =

    0.2769    0.1231
    0.1231    0.2769

>>
```