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function d=jacobiown(A); A1=A; tol=1e-12; % n=length(A1); off=1; %==Jacobi Method====
while off>tol for p=1:n-1 for q=p+1:n %getting c,s if A1(p,q)~=0
tau=(A1(q,q)-A1(p,p))/(2*A1(p,q)); if tau >=0 t=1/(tau+sqrt(1+tau^2)); else
t=-1/(-tau+sqrt(1+tau^2)); end c=1/sqrt(1+t^2); s=t*c; else c=1; s=0; end %=====
%building J% J=eye(n); J(p,p)=c; J(p,q)=s; J(q,p)=-s; J(q,q)=c; %===== A1=J'*A1*J;
diag(A1); end end off=sqrt(norm(A1-diag(diag(A1))))); end d=diag(A1); end

```