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COURSE: B.Sc(hons.)Physics

ROLL NO.: 81

**SOURCE CODE:**

clc;

for i=1:3

for j=1:3

A(i,j)=input("input the value of coefficient A["+string(i)+","+string(j)+"]=")

end

end

m1=12

m0=1

i=0

disp(A)

X=[1;1;1]

while (abs(m0-m1)>0.001)

C=A\*X

m1=m0

m0=max(C(1,1),C(2,1),C(3,1))

q=find(C==m0)

t=C(q,1)

C(q,1)=C(1,1)

C(1,1)=t

X=C/m0

i=i+1

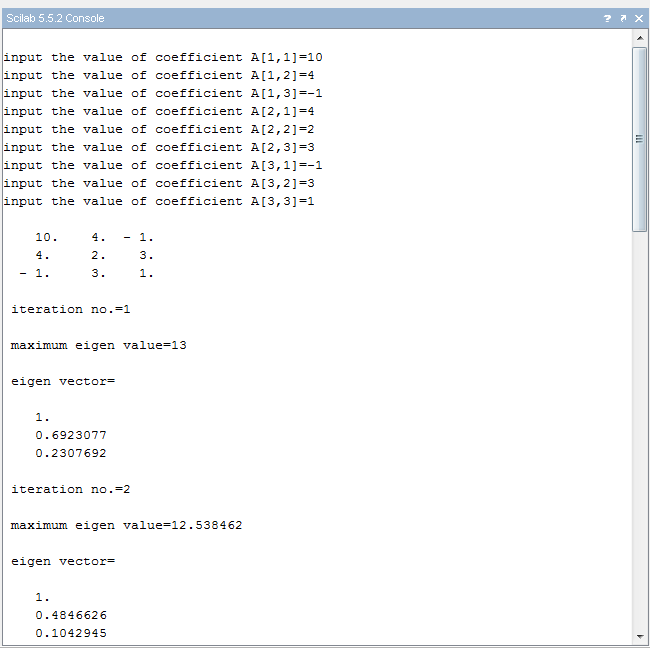
disp("iteration no.="+string(i))

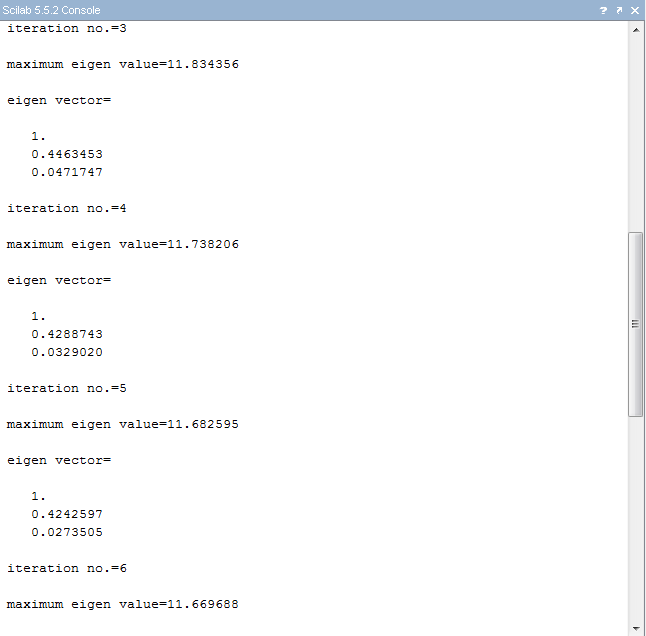
disp("maximum eigen value="+string(m0))

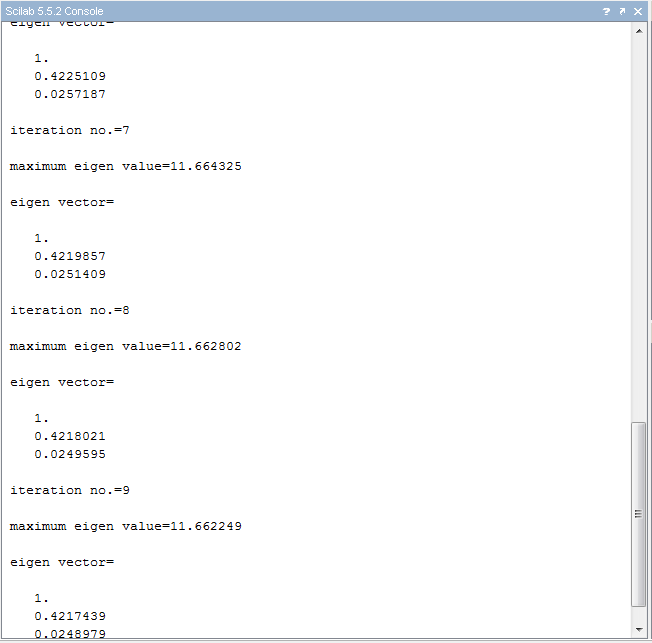
disp(X,"eigen vector=")

end

**OUTPUT:**

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