clc

clear all

A = input('Enter the Matrix A: ');

[P,D] = eig(A);

AP=A\*P;

n=size(A);

O=zeros(n);

if(n==2)

quiver(O(:,1),O(:,2),D(1,1)\*P(:,1),D(2,2)\*P(:,2));

hold on

quiver(O(:,1),O(:,2),AP(:,1),AP(:,2));

else

quiver3(O(:,1),O(:,2),O(:,3),D(1,1)\*P(:,1),D(2,2)\*P(:,2),D(3,3)\*P(:,3));

hold on

quiver3(O(:,1),O(:,2),O(:,3),AP(:,1),AP(:,2),AP(:,3));

end

%quiver3(O(:,1),O(:,2),O(:,3),D(1,1)\*P(:,1),D(2,2)\*P(:,2),D(3,3)\*P(:,3));