Report

Contents

Problem 4 the former problem can be seen in the jog file in the same system.

normalization algorithm

function [lambda] = eig(A, x, iteration_cout)

```
% lambda = 0;
% for k = 1:iteration_cout
%    v = A*x;
%    x = v/norm(v,2);
%    lambda = x'*A*x;
% end
%
% end
```

```
A = [-261,209,-49;
   -530, 422, -98;
   -800,631,-144];
x = [1,0,0]';
lambda_1 = eig(A, x, 10)
lambda_2 = eig(A, x, 100)
lambda_3 = eig(A, x, 1000)
```

```
lambda_1 =   10.000
lambda_2 = 10.0000
lambda_3 =   10.000
```