计算方法 作业报告8

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计算方法编程练习:计算矩阵的特征值和特征向量

源程序:

jacobi.c

程序的输入:

即实对称矩阵,写在文件matrix.txt里

程序的输出:

```
 \begin{split} r[0] &= -4.061951, \ v[0] = (\ 0.768640 \ -0.221691 \ -0.369283 \ -0.395445 \ -0.259420 \ ) \\ r[1] &= -12.760555, \ v[1] = (\ 0.089240 \ 0.591435 \ -0.440770 \ 0.525459 \ -0.414554 \ ) \\ r[2] &= 11.023392, \ v[2] = (\ 0.411866 \ -0.342989 \ 0.542907 \ 0.615544 \ -0.197695 \ ) \\ r[3] &= 4.574952, \ v[3] = (\ -0.103969 \ -0.546298 \ -0.607111 \ 0.422399 \ 0.379135 \ ) \\ r[4] &= 16.224162, \ v[4] = (\ 0.469878 \ 0.430087 \ 0.077583 \ 0.1010000 \ 0.760276 \ ) \end{split}
```