

ex.2

信息矩阵 H 块如下：

```
H.block(i*6,i*6,6,6) += jacobian_Ti.transpose() * jacobian_Ti; // pose to pose
/// 请补充完整作业信息矩阵块的计算
H.block(j*3 + 6*poseNums,j*3 + 6*poseNums,3,3) += jacobian_Pj.transpose() * jacobian_Pj; // point to point
H.block(i*6,j*3 + 6*poseNums, 6,3) += jacobian_Ti.transpose() * jacobian_Pj; //pose to point
H.block(j*3 + 6*poseNums,i*6 , 3,6) += jacobian_Pj.transpose() * jacobian_Ti; // point to pose
```

输出 H 的特征值，后7维接近为0，表明零空间维度为7，即单目VO的自由度为7:

```
0.00634341
0.00608493
0.00547299
0.0053236
0.00520788
0.00502341
0.0048434
0.00451083
0.0042627
0.00386223
0.00351651
0.00302963
0.00253459
0.00230246
0.00172459
0.000422374
1.25708e-16
8.63763e-17
5.18689e-17
4.38809e-17
2.98776e-17
1.45304e-17
1.59456e-18
```