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# Cholesky Decomposition with row pivoting

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Exercise sheet 4

```
[X, Y] = meshgrid(linspace(0,1,4001));  
A = exp(-(X-Y).^2);  
[L,p] = pchol(A, 1e-9);  
B = L*L.';  
norm(A(:) - B(:))
```

```
ans =
```

```
1.3837e+03
```

```
chol(A)
```

```
Error using chol  
Matrix must be positive definite.
```

```
Error in Aufgabe5_Blatt4 (line 16)  
chol(A)
```

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