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# Gaus-GAXPY with column pivoting

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Exercise sheet 3

```
A = gallery('orthog', 3*666, -2);
b = ones(size(A,1),1);
xm = A\b;
B = A;
tic;
B = gaussRank1(B);
toc
errnp = norm(xm - rsolveGAXPY(B, lsolveGAXPY(B,b)))

B = A;
tic;
[B,p] = gaussGAXPY(B);
toc
errpp = norm(xm - rsolveGAXPY(B, lsolveGAXPY(B, b(p))))

Elapsed time is 22.350058 seconds.

errnp =

    10.8680

Elapsed time is 16.616852 seconds.

errpp =

    2.1467e-15
```

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