

```
>> A=Vandermonde(100);
>> [Qm,Rm]=mgs(A);
>> [Qc,Rc]=clgs(A);
>> [Q,R]=qr(A);
>> [Qp,Rp]=qr_plus(Q,R);
>> norm(A-Qm*Rm,2)

ans =

    3.0624e-15

>> norm(A-Qc*Rc,2)

ans =

    4.9034e-16

>> norm(A-Q*R,2)

ans =

    6.0608e-15

>> norm(Qm-Qp,2)

ans =

    1.9823

>> norm(Qc-Qp,2)

ans =

    9.2564

>> norm(Rm-Rp,2)

ans =

    0.0037

>> norm(Rc-Rp,2)

ans =

    12.4349

>> norm(Qm'*Qm-eye(100),2)

ans =
```

1.0098

```
>> norm(Qc'*Qc-eye(100),2)
```

ans =

86.7254

```
>> norm(Q'*Q-eye(100),2)
```

ans =

2.1139e-15

```
>>
```