```
>> A=[2 -1 0
-1 -1 -2
0 -2 3]


A =

      2      -1       0
     -1      -1      -2
      0      -2       3

>> [Q,R] = qr(A)

Q =

 -0.894427190999916  -0.249136439561220  -0.371390676354104
  0.447213595499958  -0.498272879122440  -0.742781352708207
                  0  -0.830454798537400   0.557086014531156



R =

 -2.236067977499790   0.447213595499958  -0.894427190999916
                  0   2.408318915758459  -1.494818637367319
                  0                   0   3.156820749009882

>> A2=R*Q

A2 =

  2.200000000000000   1.077032961426901  -0.000000000000000
  1.077032961426901   0.041379310344827  -2.621596939137684
                  0  -2.621596939137684   1.758620689655173

>> [Q2,R2] = qr(A2)

Q2 =

 -0.898146239020499   0.072200486321875   0.433728513137214
 -0.439696865275764  -0.147480230964970  -0.885954992164492
                  0  -0.986426211761125   0.164205142278177



R2 =
```

```
   -2.449489742783178  -0.985527456652574   1.152707956155378
                    0   2.657671610791032  -1.348115822740204
                    0                   0   2.611391456230357

>> A3=R2*Q2

A3 =

   2.633333333333334  -1.168569876197207   0.000000000000000
  -1.168569876197207   0.937862761052346  -2.575944981594679
                    0  -2.575944981594678   0.428803905614321
```