```
% compute QR decomposition of matrices and find time taken to comput
format short
% matrix 1
m1 = 5;
A = rand(m,m);
tic;
[Q,R] = qr(A);
timeA = toc
```

```
timeA = 0.0021
```

```
format short
%matrix 2
m2 = 6;
n2 = 3;
B = rand(m2,n2);
tic;
[Q,R] = qr(B);
timeB = toc
```

```
timeB = 0.0012
```

```
format short
%matrix 3
m3 = 7;
n3 = 3;
C = rand(m3,n3);
tic;
[Q,R] = qr(C);
timeC = toc
```

```
timeC = 8.6690e-04
```

```
format short
%matrix 4
m4 = 8;
D = rand(m4,m4);
tic;
[Q,R] = qr(D);
timeD = toc
```

```
timeD = 0.0018
```

```
format short
%matrix 5
m5 = 10;
n5 = 8;
E = rand(m5,n5);
```

```
tic;
[Q,R] = qr(E);
timeE = toc
```

```
timeE = 0.0014
```

```
format short
%matrix 6
m6 = 15;
n6 = 12;
F = rand(m6,n6);
tic;
[Q,R] = qr(F);
timeF = toc
```

```
timeF = 8.9880e-04
```

```
format short
%matrix 7
m7 = 20;
G = rand(m7,m7);
tic;
[Q,R] = qr(G);
timeG = toc
```

```
timeG = 0.0011
```

```
format short
%matrix 8
m8 = 56;
n8 = 52;
H = rand(m8,n8);
tic;
[Q,R] = qr(H);
timeH = toc
```

```
timeH = 0.0020
```

```
format short
%matrix 9
m9 = 100;
I = rand(m9,m9);
tic;
[Q,R] = qr(I);
timeI = toc
```

```
timeI = 0.0020
```

```
format short
%matrix 9
m10 = 88;
n10 = 45;
J = rand(m10,n10);
tic;
[Q,R] = qr(J);
timeJ = toc
```

```
timeJ = 0.0022
```

```
list = [timeA;timeB;timeC;timeD;timeE;timeF;timeG;timeH;timeI;timeJ];
```

```
list = 10×1
    0.0021
    0.0012
    0.0009
    0.0018
    0.0014
    0.0009
    0.0011
    0.0020
    0.0020
    0.0022
```

```
%csvwrite('timingMatlab.csv',list);
```