

```
A = [5 4 7 2; -3 1 6 4; 1 3 4 5; 0.5 2 8 7];  
Ainv = zeros(4,4);  
I = eye(4,4);
```

```
[L,U] = lu(A);
```

```
for n=1:1:4  
    D = L\I(:,n);  
    Ainv(:,n) = U\D;  
end
```

```
Ainv
```

```
A*Ainv
```

```
Ainv =
```

0.0402	-0.2669	-0.1119	0.2209
0.0947	0.2281	0.4505	-0.4792
0.1019	0.1090	-0.2123	0.0603
-0.1463	-0.1707	0.1220	0.1951

```
ans =
```

1.0000	0	0.0000	0.0000
0	1.0000	-0.0000	-0.0000
-0.0000	-0.0000	1.0000	0.0000
0.0000	0	0	1.0000

