

```
>> A=[3 1 4;1 5 9;2 6 5;3 5 8];
>> [U S V]=svd(A);
>> U=round(U,3);S=round(S,3);V=round(V,3);
>> U
```

U =

-0.2680	0.7700	0.3480	-0.4630
-0.6070	-0.0670	-0.7290	-0.3090
-0.4620	-0.6040	0.5710	-0.3090
-0.5880	0.1930	0.1460	0.7720

```
>> S
```

S =

16.7870	0	0
0	2.9250	0
0	0	2.3750
0	0	0

```
>> V
```

V =

-0.2440	0.5510	0.7980
-0.5370	-0.7620	0.3620
-0.8070	0.3400	-0.4820

```
>> rank(A)
```

ans =

3

```
>> blockimage(A)
```

```
>>
```