

```
M = [1 2 3; 4 5 6; 7 8 9]
```

```
M = 3x3
```

```
1 2 3
4 5 6
7 8 9
```

```
B = [M M' M]
```

```
B = 3x9
```

```
1 2 3 1 4 7 1 2 3
4 5 6 2 5 8 4 5 6
7 8 9 3 6 9 7 8 9
```

Soucet prvku vetsich nez 3

```
sum(sum(B>3))
```

```
ans = 18
```

Logicke indexy

```
B > 3
```

```
ans = 3x9 logical array
```

```
0 0 0 1 1 0 0 0
1 1 1 0 1 1 1 1 1
1 1 1 0 1 1 1 1 1
```

Maticove indexy

```
%help find
[I,J] = find(B > 3)
```

```
I = 18x1
```

```
2
3
2
3
2
3
1
2
3
1
⋮
⋮
```

```
J = 18x1
```

```
1
1
2
2
3
3
5
5
5
```

6
⋮

```
B(B==5) = 0
```

```
B = 3×9
```

```
 1  2  3  1  4  7  1  2  3  
 4  0  6  2  0  8  4  0  6  
 7  8  9  3  6  9  7  8  9
```

Součet prvku matice

```
sum(sum(B))
```

```
ans = 120
```

Patients

```
load patients.mat Height Weight  
Bmi = Weight ./ ((Height/100).^2)
```

```
Bmi = 100×1
```

```
349.1371  
342.3650  
319.8242  
296.2798  
290.5273  
307.0934  
346.6797  
389.2734  
395.7612  
303.0303  
⋮
```

```
save bmi.mat Bmi Weight Height
```

Format vypisu

```
%help format  
format rational  
0.5
```

```
ans =  
1/2
```

```
format short
```

Statistika hodu

```
hody = randi([1 6],[1 100])
```

```
hody = 1×100
      5   1   2   4   2   6   4   1   2   1   5   5   6...
```

```
statistika = [sum(hody==1) sum(hody==2) sum(hody==3) sum(hody==4) sum(hody==5)
              sum(hody==6)]
```

```
statistika = 1×6
            16  22  13  14  17  18
```

why

The bald and tall engineer insisted on it.