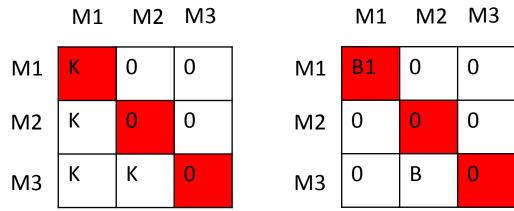


- There are 3 masses, thus, the connection matrix will be 3x3
- The connection matrix is a LOWER TRANGULAR matrix



- Diagonal elements describe connection with static world (see red boxes).
- Other element describe connection between two masses.

- Only B and K are in nxn matrix (blue texts)
- The masses and external forces acting on each mass are written in vectors (red texts)

```
#clear used variables
K:='K':
M:='M':
#setup matrix K and B
matK:=<K,0,0;0,K,0;K,K,0>:
matB:=<B 1,0,0;0,0,0;0,B 2,0>:
matM:=<M 1,M 2,M 3>:
matF:=<M_1*g(t),M_2*g(t),M_3*g(t)+f_a(t)>:
#write down the equations
eq:=mass spring damper(3, matM, matK, matB, matF):
```