

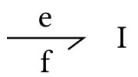
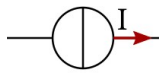
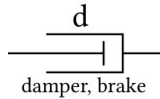
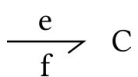
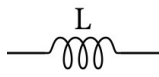
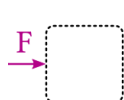
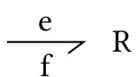

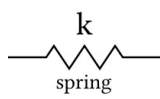
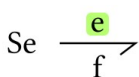
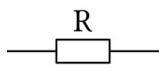
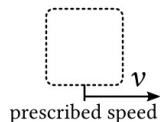
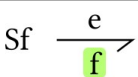

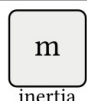
Associating bond graph junctions with series/parallel structures

This exercise should show you the associations which exists between:

- 0/1 junctions in bond graph
- series/parallel structures in electrical circuits or mechanical systems

Reminder: BG elements in electrical and mechanical domains

Associate each bond graph element with its corresponding electrical and mechanical device.

Bond graph	Electricity	Mechanics (translation)
1 		
2 		
3 		
4 		
5 		

Association 1: a single 0/1 junction with series/parallel structure

Associate each bond graph with its corresponding series/parallel electrical circuit or mechanical system.

Bond graph	Electricity	Mechanics (translation)
1 Se \longrightarrow 0 \longrightarrow I <div style="margin-left: 100px;"> \downarrow R </div>		
2 Se \longrightarrow 1 \longrightarrow I <div style="margin-left: 100px;"> \downarrow R </div>		

Association 2: combined 0/1 junc. with series/parallel structures

Associate each bond graph with its corresponding electrical circuit or mechanical system.

Bond graph	Electricity	Mechanics (translation)
1 Se \longrightarrow 0 \longrightarrow 1 \longrightarrow C <div style="margin-left: 100px;"> \downarrow \downarrow I R </div>		
2 Se \longrightarrow 1 \longrightarrow 0 \longrightarrow C <div style="margin-left: 100px;"> \downarrow \downarrow I R </div>		