

Quiz 1: safety

1. Let S be a safety property. Show that if all **finite runs** of an implementation I are **safe** (belong to S) then **all** runs of I are safe
2. Show that every **unsafe** run σ has an **unsafe finite prefix** σ' : every extension of σ' is unsafe
3. Show that every property is an **intersection** of a safety property and a liveness property

Quiz 2: liveness

- Show how the elements of the “periodic table of progress” are related to each other
 - ✓ Hint: for each pair of properties, A and B, check if any run of A is a run of B (A is stronger than B), or if there exists a run of A that is not in B (A is not stronger than B)
 - ✓ Can be shown by transitivity: if A is stronger than B and B is stronger than C, then A is stronger than C