

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 a mixture of a safety property and a liveness property

Quiz 2: linearizability/progress

- Show that linearizability is **compositional**:
 - ✓ A history H on $A \times B$ is linearizable if and only if H_A and H_B are linearizable

- Show how the elements of the “periodic table of progress” are related to each other:
 - ✓ Property P is **weaker** than property P' if P' is a subset of P