

Reminder ☒

• Strongly connected component, condensation
↳ directed acyclic graph.

• Property of DFS tree: cross edge: $dfn(o(e)) > dfn(t(e))$.

• Tournament, transitive tournament *equivalent def.*

↳ at least 1 Hamiltonian path (*unique if transitive*)

Condensation of tournament is a transitive tournament. ♥

King, king always exists!

• Condorcet paradox, majority digraph $\in \{\text{tournament}\}$

• AOA network: edge weighted simple acyclic digraph,
unique start, unique end.

Earliest time ET , Latest time LT .

Algorithm for $ET(i)$, algorithm for $LT(i)$

Total float $TF(i, j)$.

Lemma: $TF(i, j) = LT(j) - ET(i) - w(i, j)$.

Relax!