

Floyd-Warshall Algorithm

Consider a shortest path P from v_i to v_j with $MAX(P) = K$.

Hence $v_K \in P$.

Write P as the concatenation of two paths, P_1 from v_i to v_K and P_2 from v_K to v_j .

Do you agree that $Cost(P) = Cost(P_1) + Cost(P_2)$?

Questions:

- ▶ What is $MAX(P_1)$?
- ▶ What is $MAX(P_2)$?