

## Hints for Flights

- When you attempt any graph question, the first step is always to model the graph
  - What do the nodes represent?
  - What do the edges represent? Are the edges directed?
  - Draw out the graph in the example test case. Does the graph make sense?
- What algorithm should you use to compute the smallest number of layovers?
- How do you know if the addition of a direct flight will reduce the number of layovers?
  - Suppose the addition of a direct flight between  $u$  and  $v$  reduces the number of layovers required to travel from  $a$  to  $b$ . What can you say about the path that has the smallest number of layovers?