

## Group - 11

### Disaster Management Problem

Imagine an earthquake, tornado, tsunami, etc.

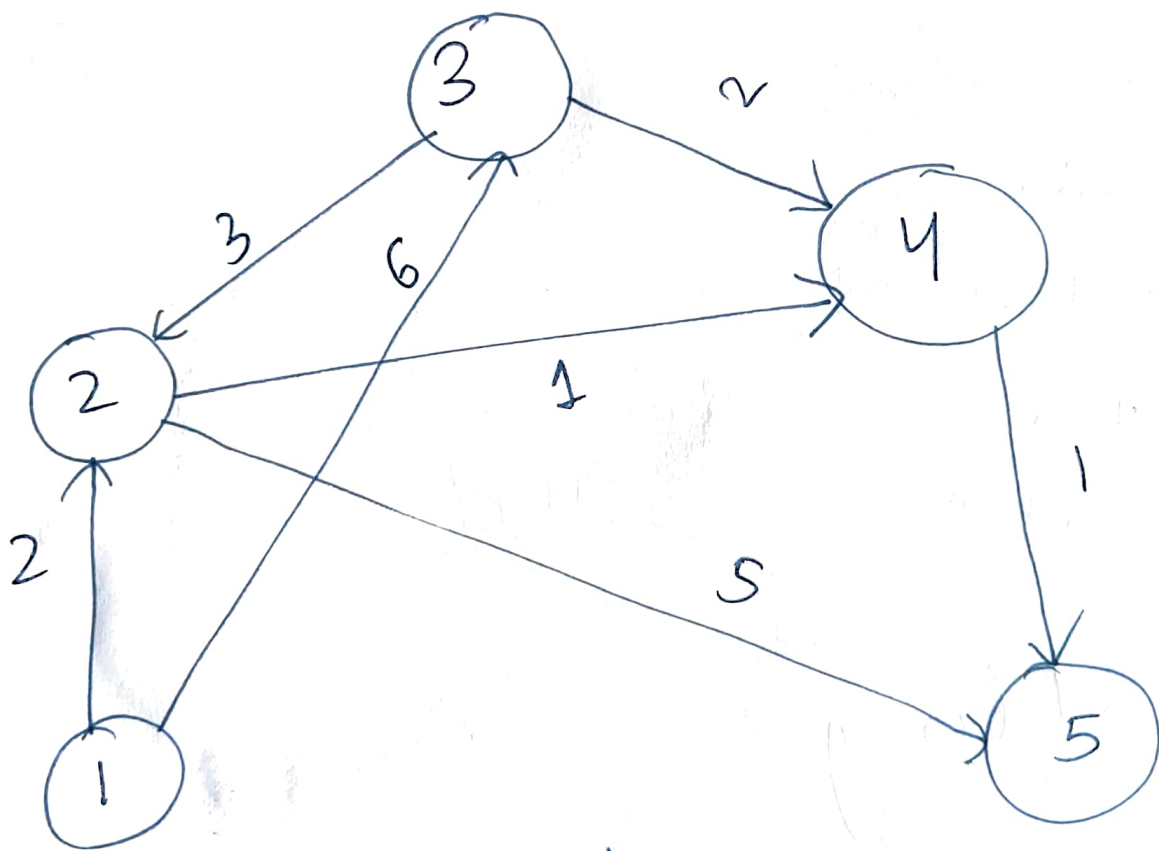
• Anything like that coming to a city and then we need to evacuate people quickly from that city.

Our goal is to evacuate from that ~~city~~ particular city to another city which has capacity to accommodate people.

Each Road has a specific capacity. Now our Problem is to find out the maximum people we can evacuate per hour.

## For Example

Consider this <sup>weighted</sup> directed graph. Here weight is nothing ~~is~~ but the maximum people that can move on a road per hour in the given direction. People are allowed to move in one horizontal direction only.



Maximum Number of people we can ~~say~~ evacuate from 1 to 5 is 6

Paths are  $\Rightarrow$   $1-2-5$  (2),  $1-3-2-5$  (3),  $1-3-4-5$  (1)