# CSC373 Worksheet 5 Solution

# August 7, 2020

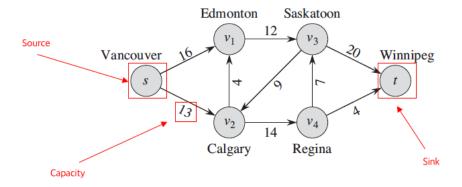
## 1. Notes

### • Maximum Flow Problem:

 Is about computing the greatest rate at which we can ship material from the source to the sink without violating any capacity constraints

### • Flow Network:

- -G = (V, E) is a directed graph in which each edge  $(u, v) \in E$  has a nonnegative capacity  $c(u, v) \ge 0$ .
- Two vertices must exist: source s and sink t
- path from source s to vertax v to sink t is represented by  $s \leadsto v \leadsto t$



- Capacity:
- Flow: