Shane Riegodedios

Dr. Antov
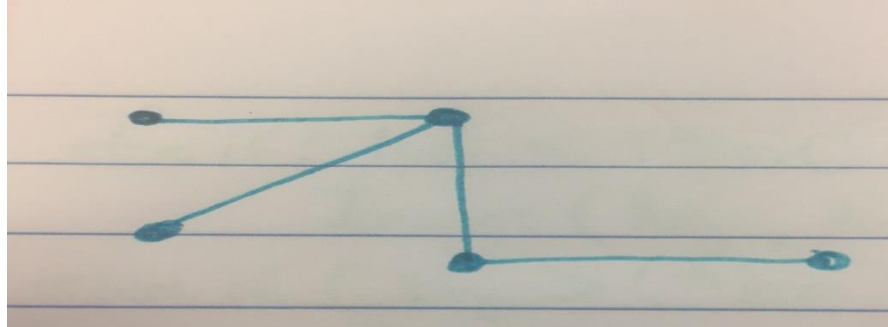
Intro to Algorithm

March 2, 2017
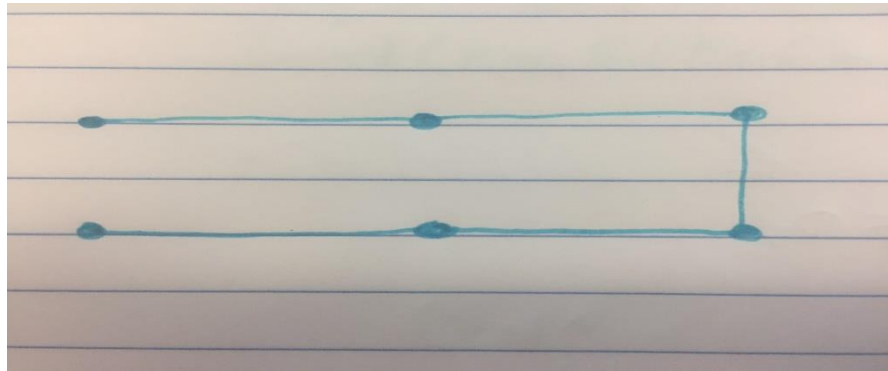
Assignment 5

1)

1.)

2.)

3.)
   a.) n − 1
   b.) n − 1
   c.) n − 1

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2)

1.) $\sum_{i=1}^{n}(cost(AllFrom) + a_1)$

$cost(AllFrom) = \theta(n)$

2.) $cost(AllFrom) = \theta(n)$

$\sum_{i=1}^{n}(\theta(1) + a_1) = \theta(n + a)$

3)

1.)   for u ← 1 to n
     for v ← 1 to n
    A'(u,v) ←0
  for i ← 1 to 0
    edges ← A Allfrom(i)
    foreach(e ∈ edges)
     k ← target of e

$$\theta(n^2 + \sum_{i=1}^{n}(n + a_1)) = \theta(n^2 + n^2 + a) = \theta(n^2)$$

2.) $\sum_{i=1}^{n}(u_1 + \theta(1)) = \theta(n + a)$