

title

Maximum
Bismillah
Mehnooz

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S. Somik

First 2 slides contain sample blocks, columns and stuff

Remark

in block

important theorem

in alertblock

Examples

in users block

text in frame

this is alert

columns

Qasim
Bashir
Malik

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text in first column

$$E = mc^2$$

- first item
- hello there

text in second column

Real World Applications

Osama
Bashir
Malina

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Maximum Bipartite Matching

CSE 300 Presentation

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Bipartite Graph Definition

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Maximum Matching

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Max Flow Problem Overview

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Relating Max Flow Problem with Maximum Matching

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Max Flow problem Algorithm

Maximum
Flow
Algorithm

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- solving max flow using ford fulkerson takes $O(ef^*)$ time, where $f^* = \text{max flow}$, but in our problem, $f^* = n = \text{no of vertices}$ and $\text{no of edges} = m + 2n$, $m = \text{no of edges in bipartite graph}$ and $2n$ edges are added later to convert the problem into max flow problem. So running time

$$= O((m + 2n)n) = O(mn + n^2) = O(mn)$$

- but, we can use a simpler way to solve this since edges are unweighted, although we get same time complexity
- even simpler way is a recursive way which is shown as "Alternative approach" in the fancy slides from the internet

Solving Main Problem

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Time Complexity

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Alternate solutions

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References

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