

# D-regular graph(Directed — Undirected)\*

## Project 9<sup>†</sup>

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### Abstract

This paper describes the techniques followed by our team to implement a powershell script to make a *graph in latex* as a part of the course CS 213 Software System Lab.

## 1 Working Of Code

Our program takes input from user for undirected or directed graph. After this step it ask if user want to give *matrix file*.

### 1.1 Matrix file

A  $n \times n$  matrix file is required for this program to work. Any char or integer(0 for no link) can be given in a cell of matrix. These will represent edge labels in the formed graph. If user does not want to give a matrix then our program ask for the number of vertices required in graph. Then our program execute and final pdf is displayed.

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\*This is a report on the course project for the course CS 213 Software System Lab

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## 2 Step by Step Improvement

Firstly program for simple directed graph was made using only latex in which we need to manually set number of vertices in a file and execute. Then we tried our best to make it user friendly using powershell.

All the Latex syntax were written in a file using powershell.

Powershell takes input from user and write a file in latex.

After the file has been written, powershell will execute the latex file and will display the PDF on screen. It will automatically remove all the \*.tex,\*.log files after the work is done.