CO150 - Graphs and Algorithms

Prelude

The content discussed here is part of CO150 - Graphs and Algorithms (Computing MEng); taught by Iain Phillips, in Imperial College London during the academic year 2018/19. The notes are written for my personal use, and have no guarantee of being correct (although I hope it is, for my own sake). This should be used in conjunction with the notes.

14th January 2019

Introduction to the structure of the course;

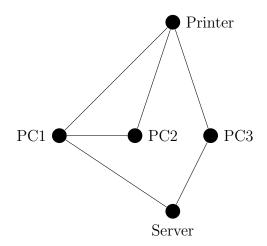
Part I: Graphs

Part II: Graph Algorithms

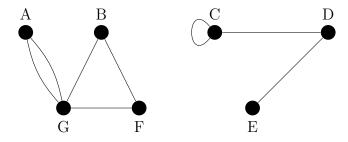
Part III: Algorithm Analysis

Part IV: Introduction to Complexity

An example graph with a real life application;



Note how all the PCs are directly connected to the printer, but PC2 can only reach the server through PC1. On the other hand, we can create a more general graph to display some features that may be less common;



Note that this isn't actually two graphs; it's **disconnected components**. Between A, and G, there are two **parallel arcs** / **edges**, and C has **loop** with itself.