**1. Introduction**

ITP 20002-03 Discrete Mathematics, Fall 2021

**Homework 1**

Your name

Email address

Introduction is to give an overview of what’s the problem that you tackled and what’s the approach to solve the problem in taking this homework.

It is expected that you rephrase the problem definition by associating it with your own findings and interpretations. You must not simply copy and paste the problem description of the homework description, because it rather shows your failure of interpreting the homework description. This section should give a short introduction to the approaches as well. It is good if the elaboration on the problem definition should relate the aspects of the problems with that of the suggested approach.

**2. Approach**

This section is to describe your solution. You need to give an enough information of your solution that readers can exactly rehearse what you have done according to the description.

The challenge here is how to manage the complexity, while not missing important details. When your solution consists of multiple parts, you’d better structure them in multiple subsections. You first need to explain the structure by which readers can understand an overall approach and relation between the parts, before going into the details. It would be good if you can plot the overall idea with figures.

**3. Evaluation**

At the evaluation section, you need to self-prove that you successfully accomplished the given tasks by experiments, demonstration and/or formal/informal proofs. Evaluation starts with discussing the criteria for checking whether a task is successful or not.

**4. Discussion**

One of the definite signs of having an effective knowledge is to apply it to the topics beyond the given material. This section is to present your ideas, thoughts, lessons learned, suggestions, opinions that you have conceived while working on the given tasks.

**5. Conclusion**

This section summarizes what you had presented in the report so far. It is a good idea to recap key points of your homework, which can tell readers that you had effectively learned the topic by accomplishing all required tasks.

Convert your report to a PDF and submit the PDF version.