



CSE261: Computer networks

Course project: OSPF(bare bone)

Phase 1 : Dijkstra algorithm



Important note: Plagiarism (copy and paste), from colleagues or from other sources (e.g online sources) will be punished, you risk losing the entire phase marks. You are responsible for developing your own submission.

Phase one objectives:

1. Getting familiar with the details of the Dijkstra algorithm.
2. Developing a python code that calculates the shortest path tree using the Dijkstra algorithm.

Phase one deliverables:

1. Python function that takes inputs in the form of network graph (nodes, edges) and output the shortest path tree.
2. Phase one report that includes:
 - a. Section one: One paragraph introduction (5-7 lines) for the dijkstra algorithm that explains its importance of the dijkstra, its complexity and how it differs from other algorithms (other types).
 - b. Section two: explanation of the dijkstra algorithm mechanism.
 - c. Section three: result section that include one test case for the code and its results (actual figures of the code output) as well as a brief comment on the results
 - d. Appendix section: your python code.

Phase one marks:

- 5 marks out of the total 20 marks dedicated to the course project.

Phase one deadline:

- Please refer to the canvas page.