School of Information Technology, Deakin University

SIT320 — Advanced Algorithms

Pass Task: **Graphs II**

At the completion of the module (**Module: Graphs II**), you are required to fill a lesson review by doing following activities.

Your tutor will then review your submission and will give you feedback. If your submission is incomplete they will ask you to include missing parts. They can also ask follow-up questions, either to clarify something, or to double check your understanding of certain concepts

Task List

- **(0)** Provide a short overview of what you learned in the module. This should be based on your learning summary from lecture (seminar), module content on cloud Deakin, your interaction with Unit Chair/Tutors/Peers, your research in the library or the internet and/or your interaction with chatGPT (make sure to provide the prompts you use).
- **(1)** Modify Dijkstra's Algorithm in this week's lab to do a Bellman-Ford (BF) instead. Test if BF can handle negative weights as well as negative cycles in the graph.
- **(2)** Write down the algorithm for Floyd-Warshall, and implement this in this weeks' lab notebook. Make sure you print the shortest path between each node. Make sure your algorithm handles negative weights as well as negative cycles.