School of Information Technology, Deakin University

SIT320 — Advanced Algorithms

Pass Task 8 — **Greedy Algorithms**

About this Task

At the completion of the module (**Module 8: Greedy Algorithms**), 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)** Write code for both dynamic programming and greedy algorithm for Activity Selection problem. Test with various test cases — demonstrate that you get the same results.
- **(2)** You have been provided code for Prim's algorithm, however, it is not optimised. Re-write the code as we discussed in the seminar to speed-up the algorithm (this implementation will be inspired from Dijkstra's implementation).