Submission Deadline: **23rd April, Wednesday, 11:59PM**

You have to submit both hard and soft copies.

Softcopy submission:

- Please write your answers on A4 paper and scan your answer script.
- Rename the file with your student ID (e.g., "21201123.pdf").
- Submit the pdf file.
- Maximum file size is 10MB.
- The filename should contain your student ID only.
- **Failing to follow the submission format will lead to a deduction in marks.**
- **Any sort of plagiarism will not only result in 0 in the assignment but will also result in a 0 in class performance.**
- Submission link: https://forms.gle/9mfJFJwa9KuycsB9A

Hardcopy submission:

● Bring the hardcopy of your assignment in the theory class **following the softcopy submission**
deadline. The assignment must be written on A4 paper and must include your student ID at the top.

Problem #1:

In the following graphs, assume that if there is ever a choice amongst multiple nodes, both the BFS and DFS algorithms will choose the leftmost node first. Starting from the **0** node at the top, which algorithm will visit the least number of nodes before visiting node **5**? **Show the simulation** of each of the algorithms and then make the decision.