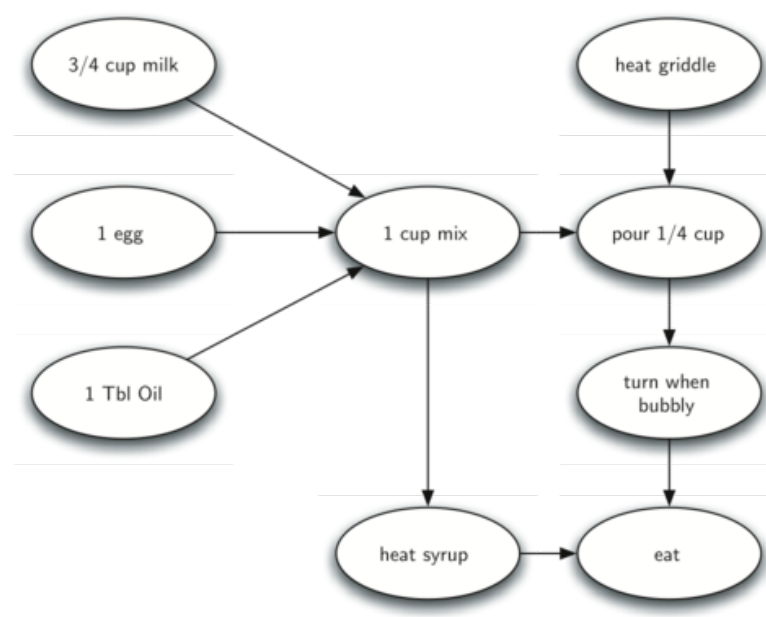**Exercise 1**

a) Present the BFS tree of the graph above, starting on vertice 0. Choose the vertices for traversal in increasing order of the labels. Which is the shortest distance from vertice 0 to vertice 4?

b) Perform the same exercise as above, but for the DFS tree. Write down the visiting order at each vertice in the DFS tree as well as every back edge, forward edge and cross edge that you find during the traversal.

Exercise 2 The recipe for cooking pancakes is described in following graph. Given that you can only do one thing at the time, how would you cook a pancake? Solve the problem using an algorithm for topological sorting (why?).

Exercise 3 Read the problem *A mess with the train timetable!* in EA2025_PL in Mooshak and solve it using the techniques discussed above.