

## CS2400 Spring 2022 Project 4

Total points: 100

Due date: Friday, April 29, 2022

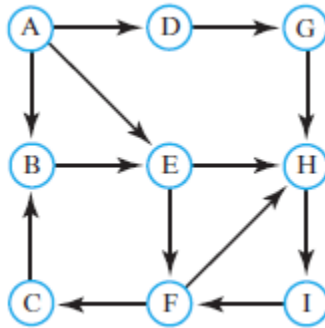
### Purpose:

1. Master graph and its representations
2. Understand graph operations

**“Please start working on this assignment as early as possible!”**

### Task Descriptions:

(50 pts) **Task 1:** Write Java codes to **create** the graph below, using the **adjacency list** representation.



(50 pts) **Task 2:** Based on your codes of Task 1, **implement** a **neighbor** function that returns an **array** containing the neighbors of a vertex; Please **test** your implemented neighbor function to **obtain** the neighbors of the vertex *E* of the graph above and **print** out.

This project will be graded based on the quality of your program. Please note that **Java interface and generic data types are NOT required** in this project.

### What to Submit?

1. Source codes for Tasks 1 and 2 (Note: properly comment your codes)  
Note: Please test your source codes using the **Eclipse** IDE and see if the codes are executable. **Non-executable programs will result in a grade of zero.**
2. Please zip all documents as **yourname\_p4.zip** and submit it in Canvas.