Floyd-Warshall Algorithm (Problem Statement)
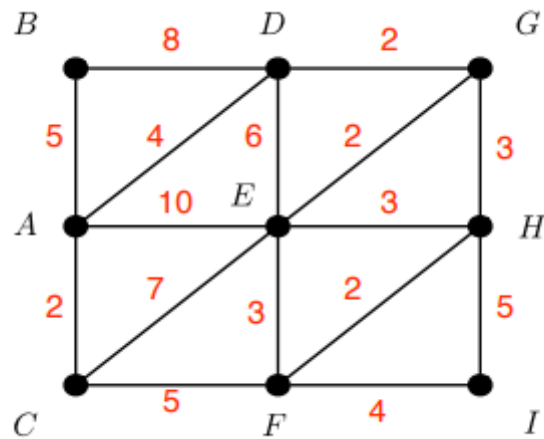
a) Apply the Floyd-Warshall algorithm to the graph in the following graph. Write a program to find the shortest path from A to H and display the initial values of the d(i, j), i, j =1,2,...,9; the values after k = 1, k = 3, and k = 5; and the final values.

b) How can the output of the Floyd-Warshall algorithm be used to detect the presence of a negative-weight cycle? Explain your answer.