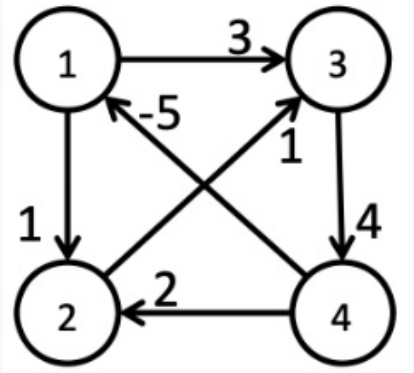
Quiz 9

Q1

Select all that are the intermediate vertices of the path $\langle a, c, e, f, a, b \rangle$.

Answer: c, e, f, a

Q2



1. What is the shortest path distance from vertex 4 to vertex 2 when no intermediate vertices are allowed?

   Answer: 2

2. What is the shortest path distance from vertex 4 to vertex 2 when the intermediate vertices are from {1} ?

   Answer: -4

3. What is the shortest path distance from vertex 4 to vertex 2 when the intermediate vertices are from {1, 2}?

   Answer: -4

4. What is the shortest path distance from vertex 4 to vertex 2 when the intermediate vertices are from {1, 2, 3}?

   Answer: -4

Q3

We use adjacency ___ to implement the input graph in the Floy-Warshall algorithm.

Answer: matrix

Q4

What is the time complexity of the Floyd-Warshall algorithm?

Answer: $O(|V|^3)$