### Ans4)

### 1. add\_vertex

Purpose:  
This function adds a vertex to the graph. Each vertex is associated with a map of its neighbors and the corresponding edge weights.

Parameters:

* char name: The name of the vertex.
* const unordered\_map<char, int>& edges: A map where each key is a neighboring vertex and each value is the weight of the edge connecting the vertex to the neighbor.

### 2. shortest\_path

Purpose:  
This function computes the shortest path from a start vertex to a finish vertex using Dijkstra's algorithm.

Parameters:

* char start: The starting vertex for the path search.
* char finish: The destination vertex where the shortest path needs to end.

Returns:  
A vector of characters representing the path from the start vertex to the finish vertex.

Implementation Details:

* Initialize distances and previous nodes:
* Set initial distances and populate the priority queue:
* Dijkstra's algorithm main loop:

### 3. main

Purpose:  
Sets up the graph with vertices and edges, and then finds and prints the shortest path from vertex 'A' to vertex 'H'.