**Output: -**

Enter the size of the graph: 5

Enter the size of input: 7

Enter edges of the graph:

Enter the value of 1 edge and its weight: 0 1 4

Enter the value of 2 edge and its weight: 0 2 2

Enter the value of 3 edge and its weight: 1 2 1

Enter the value of 4 edge and its weight: 1 3 5

Enter the value of 5 edge and its weight: 2 3 8

Enter the value of 6 edge and its weight: 2 4 10

Enter the value of 7 edge and its weight: 3 4 2

Enter the heuristic values for the vertices of the graph:

Enter 0 vertex's heuristic value: 7

Enter 1 vertex's heuristic value: 6

Enter 2 vertex's heuristic value: 2

Enter 3 vertex's heuristic value: 1

Enter 4 vertex's heuristic value:0

Enter the starting vertex of the graph: 0

Enter the ending vertex of the graph: 4

Path cost: 11

Optimal path found: 0 1 3 4