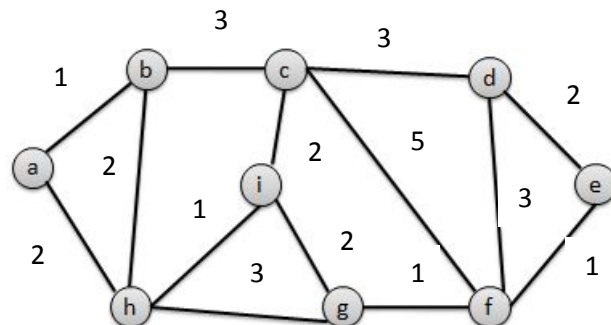


Exercise1

Let $G=(V,E)$ be the following graph:

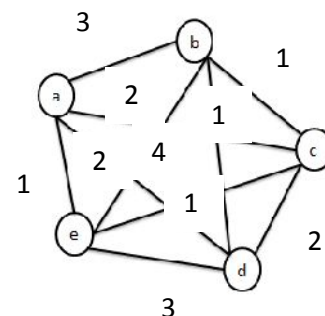
- Calculate the size of the correspondent tree
- Build one tree, then compute its weight
- Extract the MST using Prim's algorithm.



Exercise2

We consider the following graph:

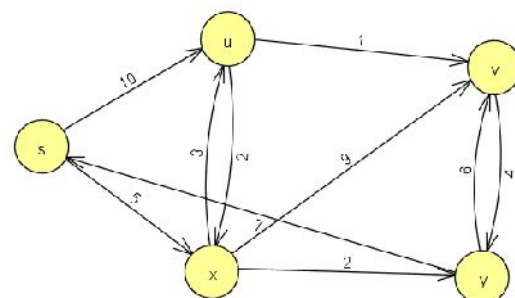
- Apply the Kruskal's Algorithm to build the minimum spanning tree.
- Calculate its weight



Exercise3

Let $G=(V,E)$ be a graph shown by this scheme

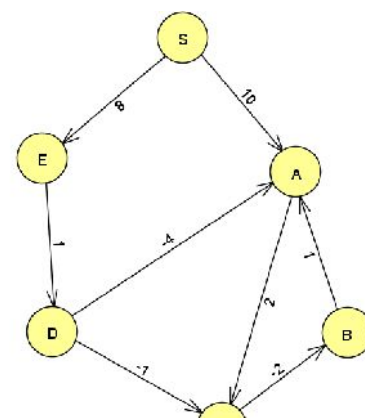
- Determine the shortest path arborescence from the Vertex s to any other vertex from G, using Dijkstra's algorithm



Exercise4

Let $G=(V,E)$ be the following directed graph:

- Determine the shortest path arborescence from the Vertex s to any other vertex from G, using Bellman-Ford's algorithm



Exercise5

Let the graph $G=(V,E)$ presented by this scheme:

- Give the order of the visited vertices using :
- Breadth First Search(BFS)
- Depth First Search(DFS)

