Data Structure and Algorithms Lab

ODD 2022

Supplementary Lab Exam

Time: 60 min

Marks: 20

Instructions:

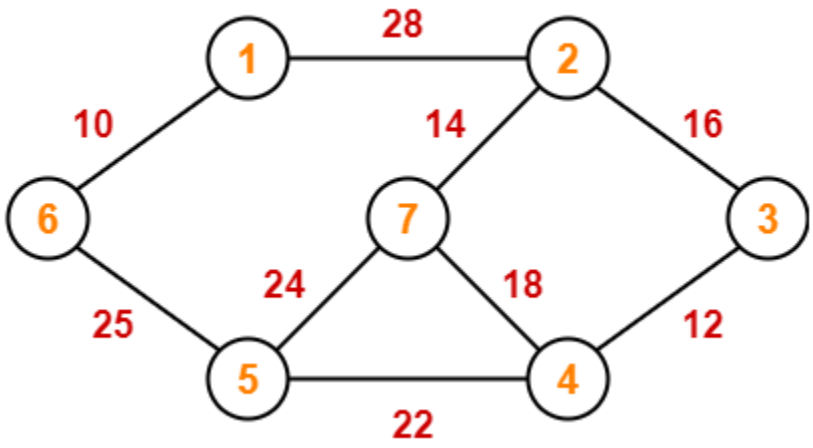
1. Submit a pdf file having code and output screenshots
2. FilenameshouldbeRollNo_Name_Supp_DSALab.pdf
3. Output Screenshot should NOT be cropped at all

Q1. [10 Marks]
Consider an array of lists having k sorted linked lists. Merge all the linked-lists into one sorted linked-list and return it.

Example 1:
Input: lists = [[1,4,5],[1,3,4],[2,6]]
Output: [1,1,2,3,4,4,5,6]

Explanation: The linked-lists are:
[
  1->4->5,
  1->3->4,
  2->6
]
merging them into one sorted list:
1->1->2->3->4->4->5->6

Q2. [10 Marks]
Write a code to implement the below graph.



Implement prim's algorithm on the above graph to find minimum cost spanning tree.