Assignment 2

Task 1

Define 3 functions based on the disjoint set properties

- a. MakeSet(x): Creates a new set S_x where x is it's only element (and therefore it is the representative of the set).
- b. **Union (x,y)**: Replaces S_x , S_y by S_x U S_y . One of the elements becomes the representative of the new set.
- c. **Find(x)**: Returns the representative of the set containing x.

Provide a short description of the functions and how they work.

Task 2

Use Kruskal's Algorithm to find the MST of the following graph. (show the algorithm and the simulation)

