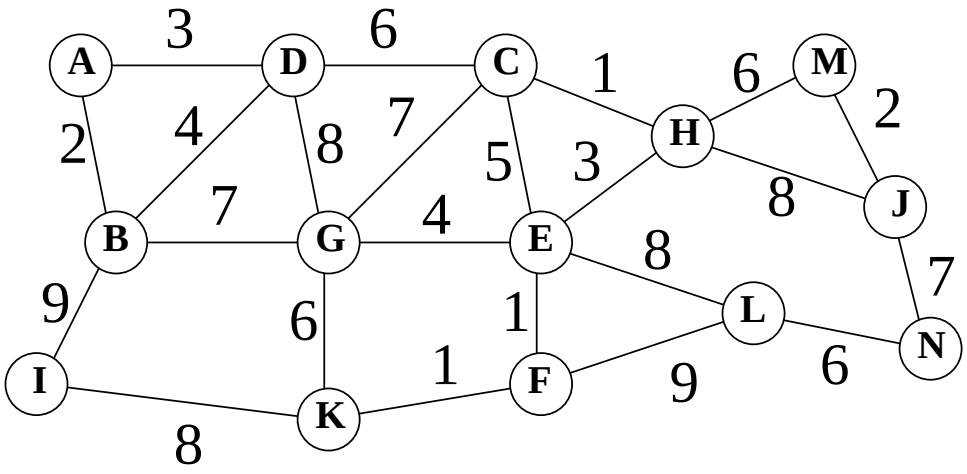
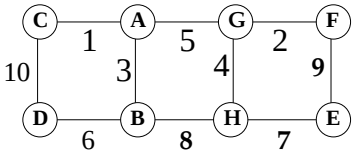
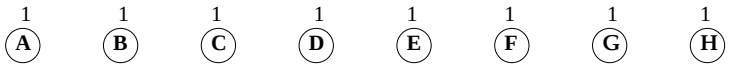
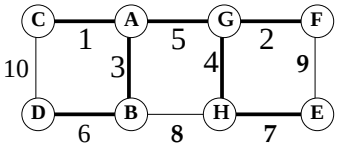


Figure 1: A Weighted Graph

Find the minimum weight spanning tree of the above graph. Show your steps, using the Union/Find algorithm shown in class to keep track of components.


C
A
G
F
D
B
H
E
1
5
2
10
3
4
9
6
8
7


1 1 1 1 1 1 1 1
A B C D E F G H


C
A
G
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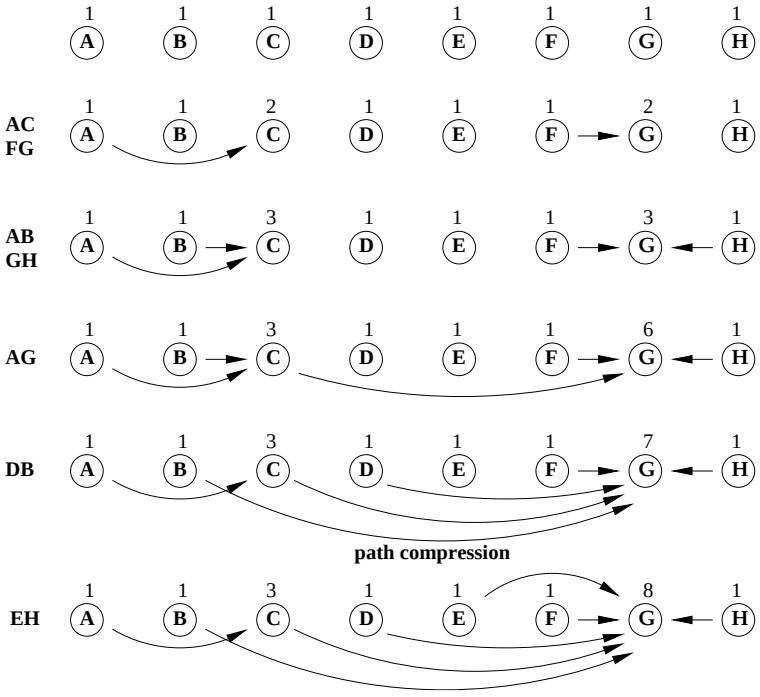
1 1 1 1 1 1 1 1
A B C D E F G H
AC
FG
1 1 2 1 1 1 2 1
A B C D E F G H
AB
GH
1 1 3 1 1 1 3 1
A B C D E F G H
AG
1 1 3 1 1 1 6 1
A B C D E F G H
DB
1 1 3 1 1 1 7 1
A B C D E F G H
path compression
EH
1 1 3 1 1 1 8 1
A B C D E F G H