

Questions:

- 1) Let G be an UWCG with distinct edge weights, and e_{\max} be the max edge weight and e_{\min} be the min edge weight.
 - G must contain unique MST **T**
 - Every MST of G contains e_{\max} **F**
 - Every MST of G contains e_{\min} **T**
 - Some MSTs of G may contain e_{\max} **T**
 - If e_{\max} exists in MST, its removal will make the MST disconnected. **T**

- 2) Let G be an UWCG , n vertices, and w be the min edge weight and e be a specific edge with weight w .
 - a) G must contain unique MST **F**
 - b) Every MST of G contains e **F**
 - c) Every MST of G must contain at least one edge with weight w . **T**
 - d) If e is not in MST, then in that cycle, all edges contain the same weight w . **T**
 - e) Some MST's of G may contain e . **T**