1. Consider the order-requirement digraph below:

(a) Find a critical path and compute its length.

(b) Schedule these tasks on two processors using the list algorithm with each of these priority lists:
   i. $T_1, T_2, T_3, T_4, T_5, T_6, T_7$

   ii. $T_2, T_1, T_3, T_6, T_5, T_4, T_7$

(c) Explain why no possible priority list will ever lead to a completion time equal to the length of the critical path. (Assuming there are only two processors.)

(d) What if you have three processors?
2. Use the list processing algorithm on the following order requirement digraph

(a) with two processors using the list \( T_1, T_2, T_3, T_4, T_5, T_6, T_7 \).

(b) with two processors using the list \( T_1, T_2, T_3, T_4, T_6, T_5, T_7 \).

(c) Does either list lead to an optimal schedule?