Let T and T' be two topologies on X. If T's T what does connected was in one topology imply about connected was in the other. it X has a separation in 7 it also has one in T', i.e X is not connected in Y-> X is not connected in T', IX does not have a separation in 71 then it does not in 7 so connected in TI -> connected in T. we could have that X has a separation in Y' but not in Y