**Programming project - 1**

1. **Are the average ETE values, obtained from step 2, different for each of the 5 times that step 1 is repeated? Why?**
2. None of the average ETE values are equal. Average time depends on every transmission. These 5 iterations are sent one after the other depending on situation over which that happen, ETE time varies. These will vary drastically if done over internet.
3. **Compare the average and maximum ETE for steps 2, 3, and 4 for TCP only. Explain the differences.**
4. Maximum ETE is very high compared to the average ETE time. Because average is sum of total duration divided by number of transmission, which max. And min. ETE included.
5. **Compare the average and maximum ETE between TCP and UDP, for each of steps 2, 3, and 4. Explain the differences between TCP and UDP. What conclusion can you draw in terms of the performance of TCP and UDP?**
6. TCP has low average ETE time compared to UDP. Whereas UDP has very low maximum ETE compared to TCP. So, we can conclude that if we want overall good rate TCP is best. In another case, if we want every packet to reach destination with as short time as possible then UDP is preferable.
7. **If the tests were run over the Internet, where there is a chance of packet loss, how would the ETE values be different between UDP and TCP?**
8. As, there can be a packet loss in internet. We need to take care about timeout, as TCP has low average ETE we can make timeout and re-transmit as soon as possible. In UDP we need to wait for more to conform about packet loss.