**ITT440 Network Programming**

**Skill Based Test (40%)**

**Name:**

**Student ID:**

**Group:**

**Answer ALL Questions**

**Deliverables:**

1. Named your answer file using the following format:

“*<student\_id> <short name> Skill Base Test.pdf*”.

Incorrect named file **WILL NOT** be mark.

Upload the pdf into given Google Drive link as published in ITT440 Telegram Group.

1. You may upload / publish your codes in Github Repository. Please provide correct link in your answer file.
2. Due date: **Wednesday 17th January 2024 before 9am**.

**Late Assignments**

NO late assignments or make up will be accepted.

**Plagiarism**

If you consult any outside sources when doing your work, you are expected to further document these sources. Give credit where credit is due. Plagiarism will not be tolerated. You will be given zero mark and be reported to UiTM’s academic office.

**Question 1 – Client Socket Programming (5%)**

Congratulation for connecting to itt440 server and downloading this file.

Answer: Paste the source codes and sample run screen shot below.

Github Repository link:

**Question 2 – C Socket Programming (10%)**

You are required to create client-server program in C programming language for random number. You may choose either tcp or udp transmission protocol.

a) Write a server program to choose one random number ranging from 0 to 99.

b) Write a client program to retrieve random number from server and display it accordingly.

Answer: Paste the source codes and sample run screen shot below.

Github Repository link:

**Question 3 – Python Socket Programming (15%)**

You are required to create client-server program in Python programming language for a sphere volume calculation. You may choose either tcp or udp transmission protocol.

a) Write a server program that will calculate sphere volume based on received radius value.

b) Write a client program to get user input radius value and display received sphere volume value from server. Display it accordingly.

Answer: Paste the source codes and sample run screen shot below.

Github Repository link:

**Question 4 – Python Parallel Programming (10%)**

Write a Quote of the Day (QOTD) server in python which uses a threading library to handle multiple requests from the client. The quote must be stored in an array and the server must retrieve the quote in a randomised manner. The server must use TCP protocol at port 8484.

Answer: Paste the source codes and sample run screen shot below.

Github Repository link: