

# ***Network Simulation***

## ***Labwork 1: Running the first script***



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March 2022

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## 1. Run the program

- After running the program, this is the result:

```
At time +2s client sent 1024 bytes to 10.1.1.2 port 9
At time +2.00369s server received 1024 bytes from 10.1.1.1 port 49153
At time +2.00369s server sent 1024 bytes to 10.1.1.1 port 49153
At time +2.00737s client received 1024 bytes from 10.1.1.2 port 9
```

## 2. Explain the scenario

\*\*\* IP address of the client is 10.1.1.1

\*\*\* IP address of the server is 10.1.1.2

- Firstly, the client sent a request which is 1024 bytes to the server by port 9
- Then, the server received the request at port 49153
- As soon as possible, the server sent a response back to the client with the same port 49153
- Finally, the server received the response from port 9

## 3. What protocols are implemented in the example?

- UDP - User Datagram Protocol and IPv4 - Internet Protocol version 4 are the protocols implemented in the example

## 4. What are the sender and receiver? How is network traffic generated?

- The sender is the client and the receiver is the server
- The network traffic is generated by a single point-to-point link between two nodes. With two applications are UdpEchoServerHelper and UdpEchoClientHelper, it helps us to generate traffic