Assignment 3

Part 4:

1. **C++ libraries:**

The list of libraries that are used in networking in c and c++ are given below.

Boost.Asio, Asio, ACE, C++ Network Library, POCO, Qt, Raknet, ZeroMQ (C++), nanomsg (C Library), nng (C Library), Berkeley Sockets, libevent, Apache APR, yield, Winsock2(Windows only), wvstreams, zeroc, libcurl, libuv (Cross-platform C library), SFML's Network Module, C++ Rest SDK (Casablanca), RCF, Restbed (HTTP Asynchronous Framework), SedNL, SDL\_net, OpenSplice|DDS, facil.io (C, with optional HTTP and Websockets, Linux / BSD / macOS), GLib Networking, grpc, GameNetworkingSockets, CYSockets

1. DNS:

unistd.h, Gethostbyname() is a function in c which provides the name of the machine which a person is using.

getaddrinfo() returns the ip address of the machine which a user is using.

1. ARP: iphlpapi.h
2. Ping : ping()
3. Address Conversion: arpa/inet.h
4. Byte Ordering: htonl, htons
5. **Java Libraries:**

Java.net is a library in java which has most of the functions specific to networking.

1. DNS:

The function InetAddress.getByName returns the name of the host computer, InetAddress.getaddrinfo() returns the address name and other related information.

1. ARP:

There do not exists a built-in function to get arp in java.

1. Ping: InetAddress.isReachable()
2. Address Conversion:
3. A prebuild function to perform the address resolution do not exists.
4. Byte Ordering: ByteOrder.nativeOrder() a function used for byte ordering.