Homework 6

1.

    a. Blocking: connect(),accept(),write(),read()

       Non-blocking: socket(), bind(), listen(), close()

       Blocking means that the caller waits until the callee finishes its processing. For instance, a "blocking read" from a socket waits until there is data to return (and the caller is placed in a wait queue); a non-blocking read does not, it just returns an indication (usually a count) of whether there was something read or an error (usually -1) if the call fails.

       Blocking is considered synchronous whereas Non-blocking is considered asynchronous.

       This is a form of Indiret Communication that is done via a port, which consists of a queue of messages. Sender keeps the message in the mailbox and the receiver picks them up.

    b. To communicate between processes in a different machine, we need to get the ip address of the remote machine. Once, we have that, we pass that address while socket creation in the client code.

       Hence, in the program created, we would edit line 48 from:

       inet_aton("127.0.0.1",&cons_addr.sin_addr);

       /* connect to local host */

       to:

       inet_aton(<Your_IP_ADDRESS>, &cons_addr.sin_addr);

       /* connect to remote host*/

       We would also have to change the port number to match that of the server.

2. a) Yes, they are the same as only the parent process creates that buffer and both processes share the same buffer.

b) Virtual Address