**ΗΜΥ 316**

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**Team 7**

**Assignment 6**

**Due Date 10 Feb**

**Exercise 1**

socket (): This command is used as a syscall in order to create a new socket which is one end of intracommunication. It receives as arguments the following:

a. socket’s address domain

b. socket type

c. socket’s protocol

bind (): This command sets address and the size of it bytes to the socket when it is created as when it does so its address is undefined.

listen (): This command sets the limit of the queue for the incoming connection requests. It receives as arguments the following:

a. socket

b. max queue size (for pending connection requests)

accept (): This command exports the first request for connection from the pending connections (listen). It creates a new connected socket and returns a new file which refers to it. It receives as arguments the following:

a. socket

b. address length

c. socket address

connect (): This fuction works as a syscall which connects a socket with its given address. In order to define the addressing type, the address size in bytes must be also given to it. In this fashion, we establish the start of communication. It receives as arguments the following:

socket

address length

server address

serve(): This command reads the client’s message and prints it. Afterwards, when “Enter” is pressed by the user, each character is read and gets sent to the server.

read (): This command reads a set amount of bytes (set by the count) from a file descriptor and places them in a buffer. It receives as arguments the following:

a. file descriptor

b. count

c. buffer

write (): This command writes count amount of bytes in the file given by the file descriptor starting from the buf value of the buffer. A read command is expected to follow afterwards (after the write command). It receives as arguments the following:

a. file descriptor

b. count

c. buffer

close (): This command is used to disable any mentions to a file so that it can be reused when the file descriptor is closed. It receives as arguments the following:

a. file descriptor

**Exercise 2**

**Objectives:**

* Create a programm that implements the stop and wait protocol
* While displaying the frames and acknowledgements passed through a channel

**Main solution:**

We used the channel as a medium where the frames and ACK are sent through before reaching their destination (Server/Client)

**Text

Description automatically generatedResults:**