Michael Smith

CSE 530

30 October 2017

Lab 3 Questions

1.
    a. Listen – Listen listens for a connection to be established to the socket. The correct syntax is int listen(int sockfd, int backlog);. The parameters are the socket that is going to have the connection established and backlog is the maximum length of pending connections for the socket. The return value is either 0 if no error occurred or –1 if there is an error.
    b. Accept – Accept allows for a connection to the socket to be accepted. The correct syntax is int accept (int sockfd, struct sockaddr *addr, socklen_t *addrlen);. The parameters being passed are: the socket that the connection is being accepted to, addr which is the address of the peer establishing the connection, and addrlen which is the size of the peer's address. The return value is a nonnegative integer in the file descriptor of the accepted socket. Or it's a –1 upon error.
    c. Connect – Connect initializes the connection on socket. The correct syntax is int connect(int sockfd, const struct sockaddr *addr, socklen_t addrlen);. The arguments being passed are: the socket for the connection, the address of the peer, and the size of the peer's address. The return value is a 0 upon success and a –1 upon error.
    d. Write – The write function is used to write the file descriptor. The correct syntax is ssize_t write(int fd, const void *buf, size_t count);. The arguments being passed are: count is the bytes from the buffer, buffer which is message being written, and fd which is the file descriptor. The return value is the number of bytes written upon success and a -1 upon return.
    e. Read – Read will read the file descriptor. The correct syntax is ssize_t read(int fd, void *buf, size_t count);. The arguments being passed are: fd is the file descriptor being read, buf which is the buffer that fd is being read into, and count which is the number of bytes being read. The return values are the number of bytes being read upon success, and a -1 upon error.
2. The for loop allows for a predefined number of loops to be executed before the loop is terminated.
    a. This loop does allow for multiple connection from multiple clients; however, the connections cannot allow for the connections to be running at the same time. The connections will have to be connected one after the other not simultaneously.
    b. The suggestion for the "for" loop states that there is the ability to allow for multiple connections to the server simultaneously.