Splint Tool for Client 1:

```
manu@LAPTOP-DDHEUOGA:~/CAPG59/program/src$ splint client1.c
Splint 3.1.2 --- 20 Feb 2018

< Location unknown >: Field name reused:
  Code cannot be parsed.  For help on parse errors, see splint -help
  parseerrors. (Use -syntax to inhibit warning)
< Location unknown >: Previous use of
client1.c: (in function main)
client1.c:22:30: Function memset expects arg 2 to be int gets char: '\0'
  A character constant is used as an int. Use +charintliteral to allow
  character constants to be used as ints.  (This is safe since the actual type
  of a char constant is int.)
client1.c:23:2: Assignment of size_t to socklen_t:
                addr_size = sizeof(serverAddr)
  Types are incompatible. (Use -type to inhibit warning)
client1.c:27:8: Argument to exit has implementation defined behavior: 1
  The argument to exit should be 0, EXIT_SUCCESS or EXIT_FAILURE (Use -exitarg
  to inhibit warning)
client1.c:31:2: Return value (type int) ignored: scanf(" %[^\n]s"...
  Result returned by function call is not used. If this is intended, can cast
  result to (void) to eliminate message. (Use -retvalint to inhibit warning)
client1.c:32:2: Return value (type ssize_t) ignored: send(clientSocke...
  Result returned by function call is not used. If this is intended, can cast
  result to (void) to eliminate message. (Use -retvalother to inhibit warning)
client1.c:35:7: Variable compare_strings used before definition
  An rvalue is used that may not be initialized to a value on some execution
  path. (Use -usedef to inhibit warning)
client1.c:38:20: Variable recvValue initialized to type ssize_t, expects int:
                recv(clientSocket, buffer, sizeof(buffer) - 1, 0)
  To allow arbitrary integral types to match any integral type, use
  +matchanyintegral.
client1.c:52:5: Return value (type int) ignored: scanf(" %[^\n]s"...
client1.c:53:5: Return value (type ssize_t) ignored: send(clientSocke...

Finished checking --- 10 code warnings
```

Splint Tool for Client 2:

```
manu@LAPTOP-DDHEUOGA:~/CAPG59/program/src$ splint client2.c
Splint 3.1.2 --- 20 Feb 2018

< Location unknown >: Field name reused:
  Code cannot be parsed.  For help on parse errors, see splint -help
  parseerrors. (Use -syntax to inhibit warning)
< Location unknown >: Previous use of
client2.c: (in function main)
client2.c:20:30: Function memset expects arg 2 to be int gets char: '\0'
  A character constant is used as an int. Use +charintliteral to allow
  character constants to be used as ints.  (This is safe since the actual type
  of a char constant is int.)
client2.c:21:2: Assignment of size_t to socklen_t:
                  addr_size = sizeof(serverAddr)
  Types are incompatible. (Use -type to inhibit warning)
client2.c:22:2: Return value (type int) ignored: connect(clientSo...
  Result returned by function call is not used. If this is intended, can cast
  result to (void) to eliminate message. (Use -retvalint to inhibit warning)
client2.c:25:38: Passed storage buffer not completely defined (*buffer is
                  undefined): recv (..., buffer, ...)
  Storage derivable from a parameter, return value or global is not defined.
  Use /*@out@*/ to denote passed or returned storage which need not be defined.
  (Use -compdef to inhibit warning)
client2.c:25:19: Variable recvValue initialized to type ssize_t, expects int:
                  recv(clientSocket, buffer, sizeof(buffer) - 1, 0)
  To allow arbitrary integral types to match any integral type, use
  +matchanyintegral.
client2.c:28:8: Variable compare_strings used before definition
  An rvalue is used that may not be initialized to a value on some execution
  path. (Use -usedef to inhibit warning)
client2.c:39:4: Return value (type int) ignored: scanf(" %[^\n]s"...
client2.c:40:4: Return value (type ssize_t) ignored: send(clientSocke...
  Result returned by function call is not used. If this is intended, can cast
  result to (void) to eliminate message. (Use -retvalother to inhibit warning)

Finished checking --- 9 code warnings
```

Using Splint Tool for server:

```
manu@LAPTOP-DDHEUOGA:~/CAPG59/program/src$ splint server.c
Splint 3.1.2 --- 20 Feb 2018

server.c:1: Include file <sys/socket.h> matches the name of a POSIX library,
    but the POSIX library is not being used.  Consider using +posixlib or
    +posixstrictlib to select the POSIX library, or -warnposix to suppress this
    message.
  Header name matches a POSIX header, but the POSIX library is not selected.
  (Use -warnposixheaders to inhibit warning)
server.c:2: Include file <netinet/in.h> matches the name of a POSIX library,
    but the POSIX library is not being used.  Consider using +posixlib or
    +posixstrictlib to select the POSIX library, or -warnposix to suppress this
    message.
< Location unknown >: Field name reused:
  Code cannot be parsed.  For help on parse errors, see splint -help
  parseerrors. (Use -syntax to inhibit warning)
< Location unknown >: Previous use of
server.c:17:22: Function parameter ch declared as manifest array (size constant
                is meaningless)
  A formal parameter is declared as an array with size.  The size of the array
  is ignored in this context, since the array formal parameter is treated as a
  pointer. (Use -fixedformalarray to inhibit warning)
server.c:18:29: Function parameter email declared as manifest array (size
                constant is meaningless)
server.c:18:45: Function parameter username declared as manifest array (size
                constant is meaningless)
server.c: (in function main)
server.c:33:3: Return value (type int) ignored: scanf("%d", &opt)
  Result returned by function call is not used. If this is intended, can cast
  result to (void) to eliminate message. (Use -retvalint to inhibit warning)
server.c:34:3: Return value (type int) ignored: fgetc(stdin)
server.c:47:12: Unreachable code: return 0
  This code will never be reached on any possible execution. (Use -unreachable
  to inhibit warning)

Finished checking --- 9 code warnings
```