COURSE: COMPUTER NETWORKS LABORATORY

**CSN-361**

REPORT ON

ASSIGNMENT 2

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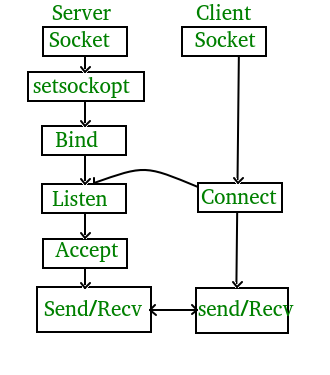
**CSE 3rd YEAR**

**PROBLEM STATEMENT 1**

**Write a socket program in C to connect two nodes on a network to communicate with each other, where one socket listens on a particular port at an IP, while other socket reaches out to the other to form a connection.**

**ALGORITHMS USED :**

● **CLIENT SERVER MODEL ALGORITHM (for client and server as shown):**



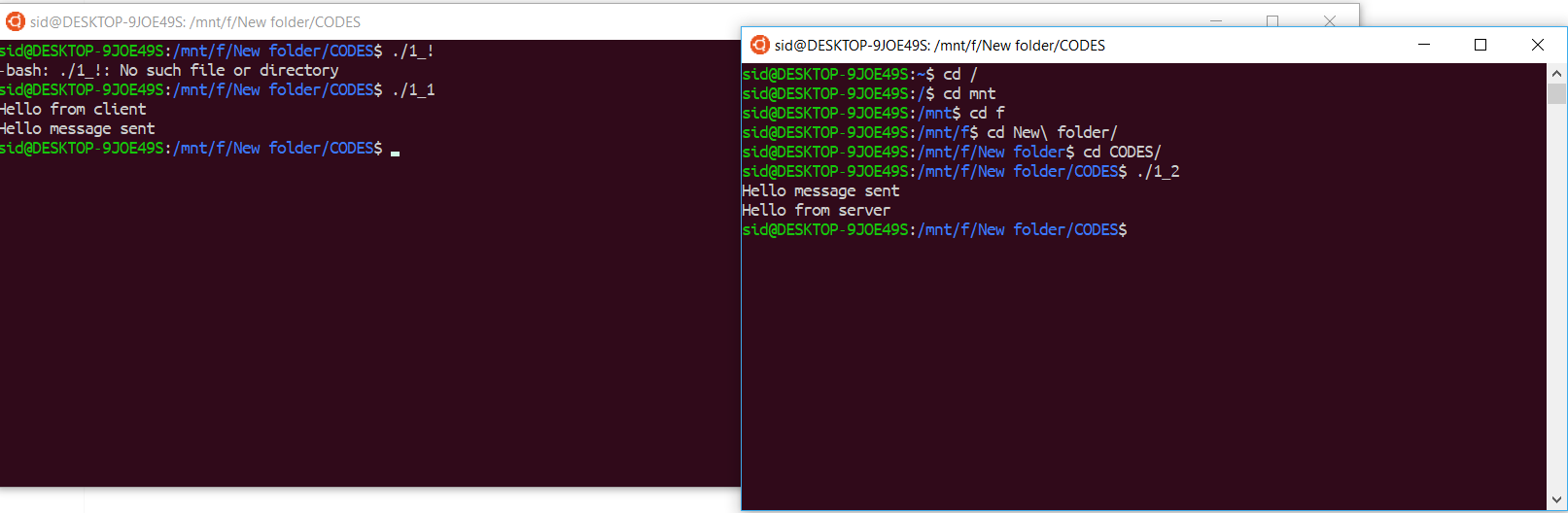
1. int sockfd = socket(domain, type, protocol)
2. int setsockopt(int sockfd, int level, int optname, const void \*optval, socklen\_t optlen);
3. int bind(int sockfd, const struct sockaddr \*addr, socklen\_t addrlen);
4. int listen(int sockfd, int backlog);
5. int new\_socket= accept(int sockfd, struct sockaddr \*addr, socklen\_t \*addrlen);
6. int connect(int sockfd, const struct sockaddr \*addr, socklen\_t addrlen);

**DATA STRUCTURES USED :**

**● Int, char \*, char []:** To store the socket , strings, buffer

● **struct sockaddr\_in :** for storing the port number and creating an instance of client and server

**SNAPSHOT**



**PROBLEM STATEMENT 2**

**Write a C program to demonstrate both Zombie and Orphan process.**

**ALGORITHMS USED :**

● **fork() :** To create new child

● **sleep() :** For proper functioning of the program

● Busy Waiting

**DATA STRUCTURES USED :**

**● Int,** To store the return value of fork() in it

**SNAPSHOT**

