

# Computer Networks Lab Experiment 1

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#include<stdio.h> //Has Standard input and output library providing simple and efficient buffered stream IO interface
#include<unistd.h> // It is a POSIX standard for open system interface.
#include<string.h> // This header file is used to perform string manipulation operations on NULL terminated strings.
#include<stdlib.h> // This header file contains the utility functions such as string conversion routines, memory allocation routines, random number generator, etc.
#include<sys/types.h> // Defines the data type of socket address structure in unsigned long.
#include<sys/socket.h> // The socket functions can be defined as taking pointers to the generic socket address structure called sockaddr.
#include<netinet/in.h> // Defines the IPv4 socket address structure commonly called Internet socket address structure called sockaddr_in.
#include<netdb.h> // Defines the structure hostent for using the system call gethostbyname to get the network host entry.
#include<time.h> // Has structures and functions to get the system date and time and to perform time manipulation functions. We use the function ctime(), that is defined in this header file , to calculate the current date and time.
#include<sys/stat.h> // Contains the structure to test a descriptor to see if it is of a specified type. Also it is used to display file or file system status.stat() updates any timee related fields. When copying one file to another
#include<sys/ioctl.h> //Macros and defines used in specifying an ioctl request are located in this header file. We use the function ioctl() that is defined in this header file. ioctl() function is used to perform ARP cache operations.
#include<net/if_arp.h> //Contains the definitions for Address Resolution Protocol. We use this to manipulate the ARP request structure and its data members arp_pa,arp_dev and arp_ha. The arp_ha structure's data member sa_data[] has the hardware address.
#include<errno.h> // It sets an error number when an error and that error can be displayed using perror function. It has symbolic error names. The error number is never set to zero by any library function.
#include<arpa/inet.h> // This is used to convert internet addresses between ASCII strings and network byte ordered binary values (values that are stored in socket address structures). It is used for inet_aton, inet_addr, inet_ntoa function
#include<math.h> // contains math functions like sqrt and pow
#include<ctype.h> //Perform character type functions like isalpha() and isdigit(). To find whether the given character is an alphabet or a digit respectively
#include<assert.h> //It is used in program assertion functions like assert(). To get an integer data type in C/C++ as a parameter which prints stderr only if the parameter passed is zero.
#include<locale.h> //Perform localization functions like setlocale() and localeconv(). To set locale and get locale conventions respectively.
#include<signal.h> //Perform signal handling functions like signal() and raise(). To install signal handler and to raise the signal in the program respectively
#include<setjmp.h> //Perform jump functions.
#include<stdarg.h> //Perform standard argument functions like va_start and va_arg(). To indicate start of the variable-length argument list and to fetch the arguments from the variable-length argument list in the program respectively.
#include<tgmath.h> // Type generic math functions
#include<complex.h> // A set of function for manipulating complex numbers
#include<stdalign.h> // For querying and specifying the alignment of objects
#include<stdatomic.h> // for atomic operations on data shared between threads
#include<stdnoreturn.h> // for specifying non-returning functions
#include<uchar.h> // types and functions for manipulating unicode characters
#include<fenv.h> // a set of functions for controlling the floating point environment
#include<wchar.h> //Defines wide string handling functions
#include<stdbool.h> //defines a boolean data type
int main()
{
    int num=0;
    printf("Enter a integer");
    scanf("%d ", &num);

    return 0;
}
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