**Kalinga Institute of Industrial Technology**

**CN LAB- 24.8.21**

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**WAP to implement an UDP Socket through which client will send few commands to the server.  
FOR EXAMPLE :  
1. If client is sending list, server will send back the list of file names present in the current working directory.  
2. If Client is sending radr filename, then server will send back the content of the file to the client.**

Server.c

**#include <stdio.h>**

**#include <stdlib.h>**

**#include <unistd.h>**

**#include <errno.h>**

**#include <string.h>**

**#include <sys/types.h>**

**#include <sys/socket.h>**

**#include <netinet/in.h>**

**#include <arpa/inet.h>**

**#include<dirent.h>**

**#define MYPORT 4952**

**#define MAXBUFLEN 200**

**int main(){**

**int sockfd;**

**struct sockaddr\_in my\_addr;**

**struct sockaddr\_in their\_addr;**

**socklen\_t addr\_len;**

**DIR \*d;**

**struct dirent \*dir;**

**int numbytes;**

**char buf[MAXBUFLEN],buf1[MAXBUFLEN];**

**if ((sockfd = socket(AF\_INET, SOCK\_DGRAM, 0)) == -1) {**

**perror("socket");**

**exit(1);**

**}**

**my\_addr.sin\_family = AF\_INET;**

**my\_addr.sin\_port = htons(MYPORT);**

**my\_addr.sin\_addr.s\_addr = INADDR\_ANY;**

**if (bind(sockfd, (struct sockaddr \*)&my\_addr, sizeof my\_addr) == -1) {**

**perror("bind");**

**exit(1);**

**}**

**addr\_len = sizeof their\_addr;**

**if ((numbytes = recvfrom(sockfd, buf, MAXBUFLEN-1 , 0,**

**(struct sockaddr \*)&their\_addr, &addr\_len)) == -1) {**

**perror("recvfrom");**

**exit(1);**

**}**

**char abc[10000];**

**strcpy(abc,"/home/user/CN\_LAB/");**

**strcat(abc,buf);**

**char mn[10];**

**strcpy(mn,"exit");**

**d= opendir(abc);**

**if(d){**

**while((dir=readdir(d))!=NULL)**

**printf("%s\n",dir->d\_name);**

**closedir(d);**

**}**

**recvfrom(sockfd, buf1, MAXBUFLEN-1 , 0,**

**(struct sockaddr \*)&their\_addr, &addr\_len);**

**FILE \*fp;**

**char ch;**

**fp=fopen(buf1,"r");**

**while(1){**

**ch=fgetc(fp);**

**if(ch==EOF)**

**break;**

**printf("%c",ch);**

**}**

**fclose(fp);**

**close(sockfd);**

**return 0;**

**}**

Client.c

**#include <stdio.h>**

**#include <stdlib.h>**

**#include <unistd.h>**

**#include <errno.h>**

**#include <string.h>**

**#include <sys/types.h>**

**#include <sys/socket.h>**

**#include <netinet/in.h>**

**#include <arpa/inet.h>**

**#include <netdb.h>**

**#define SERVERPORT 4952**

**int main(){**

**int sockfd;**

**struct sockaddr\_in their\_addr;**

**int numbytes;**

**char arg[30];**

**if ((sockfd = socket(AF\_INET, SOCK\_DGRAM, 0)) == -1) {**

**perror("socket");**

**exit(1);**

**}**

**their\_addr.sin\_family = AF\_INET;**

**their\_addr.sin\_port = htons(SERVERPORT);**

**their\_addr.sin\_addr.s\_addr = inet\_addr("127.0.0.1");**

**printf("Enter the folder name\n");**

**scanf("%s",arg);**

**if ((numbytes = sendto(sockfd, arg, strlen(arg), 0,**

**(struct sockaddr \*)&their\_addr, sizeof their\_addr)) == -1) {**

**perror("sendto");**

**exit(1);**

**}**

**printf("\nEnter the file name with extension\n");**

**scanf("%s",arg);**

**sendto(sockfd, arg, strlen(arg), 0,**

**(struct sockaddr \*)&their\_addr, sizeof their\_addr);**

**close(sockfd);**

**return 0;**

**}**