**Aim: Socket programming for Transport Layer packets(UDP Server)**

**udp\_echo\_server.c**

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#include <unistd.h>

#include <netinet/in.h>

#define PORT 10000+prn

#define BUF\_SIZE 1024

int main() {

int sockfd;

struct sockaddr\_in server, client;

char buffer[BUF\_SIZE];

socklen\_t len = sizeof(client);

sockfd = socket(AF\_INET, SOCK\_DGRAM, 0);

server.sin\_family = AF\_INET;

server.sin\_port = htons(PORT);

server.sin\_addr.s\_addr = INADDR\_ANY;

bind(sockfd, (struct sockaddr \*)&server, sizeof(server));

printf("UDP Echo Server listening on port %d...\n", PORT);

while (1) {

memset(buffer, 0, BUF\_SIZE);

recvfrom(sockfd, buffer, BUF\_SIZE, 0, (struct sockaddr \*)&client, &len);

printf("Received: %s", buffer);

sendto(sockfd, buffer, strlen(buffer), 0, (struct sockaddr \*)&client, len);

}

close(sockfd);

return 0;

}

**Compile UDP:**

gcc udp\_echo\_server.c -o udp\_server

./udp\_server # in one terminal