Exercise 5

Codes :

Server :

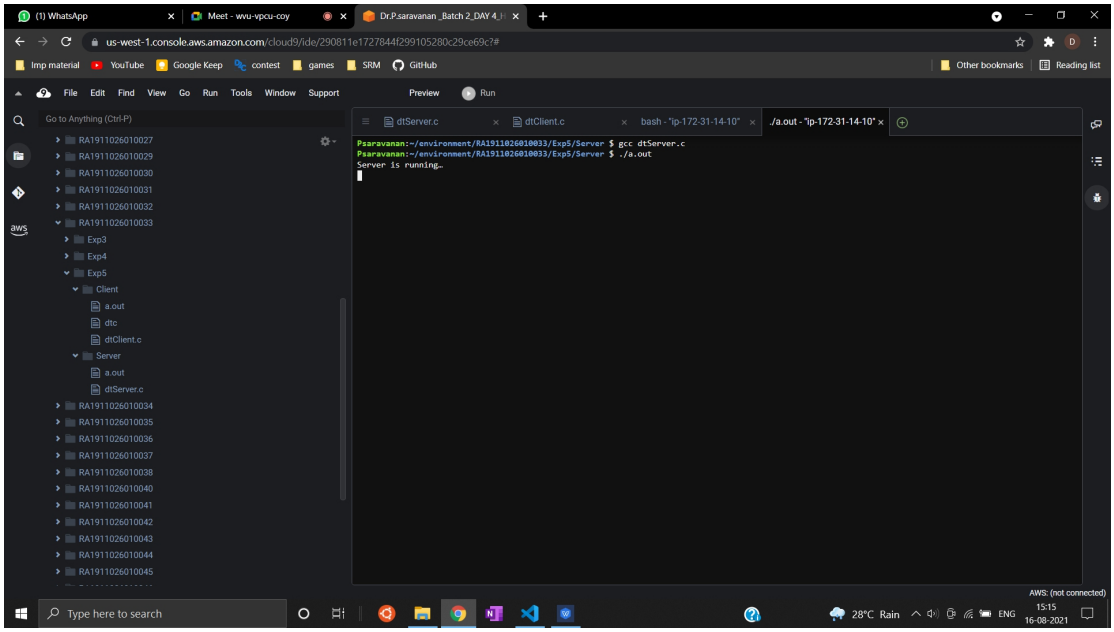
```c
#include <netdb.h>
#include <netinet/in.h>
#include <stdio.h>
#include <string.h>
#include <sys/socket.h>
 #include <sys/types.h>
 #include <time.h>
 #include <unistd.h>
 int main(int argc, char *argv[])
 {
    int sd, ad;
    char buff[1024];
    struct sockaddr_in servaddr, cliaddr;
    time_t t1;
    bzero(&servaddr, sizeof(servaddr));
    servaddr.sin_family = AF_INET;
    servaddr.sin_addr.s_addr = htonl(INADDR_ANY);
    servaddr.sin_port = htons(1507);

    bind(sd, (struct sockaddr *)&servaddr, sizeof(servaddr));
    listen(sd, 5);
    printf("Server is running…\n");
    ad = accept(sd, (struct sockaddr *)NULL, NULL);
    while (1)
    {
        bzero(&buff, sizeof(buff));
        t1 = time(NULL);
        snprintf(buff, sizeof(buff), "%24s\r\n", ctime(&t1));
        send(ad, buff, sizeof(buff), 0);
    }
 }
```

Client:

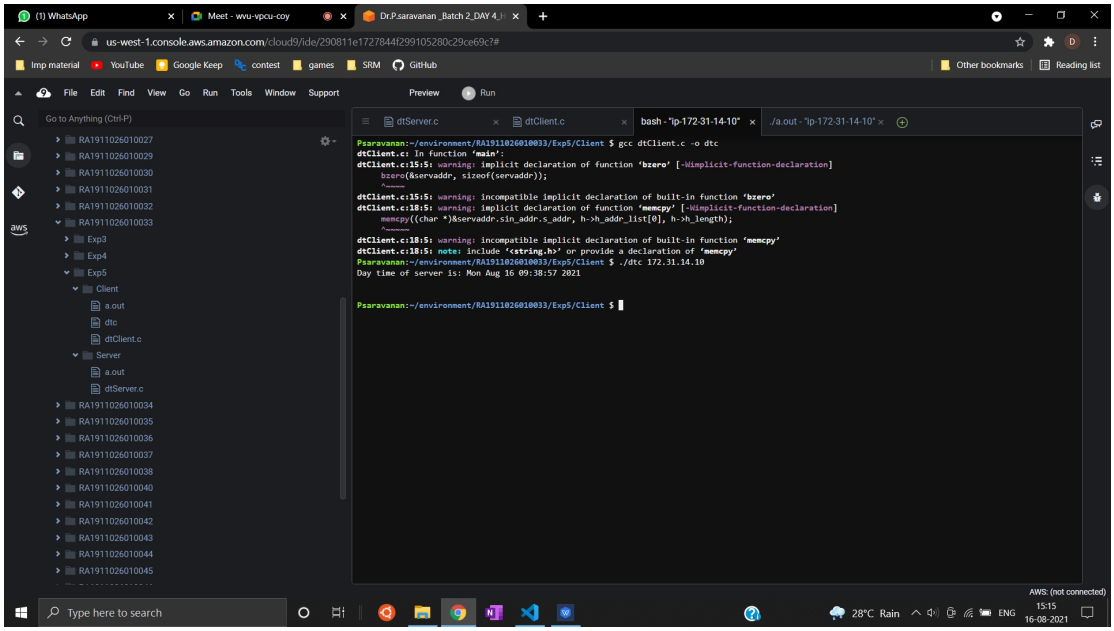
```c
#include <netdb.h>
#include <netinet/in.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/types.h>
#include <time.h>
#include <unistd.h>
int main(int argc, char *argv[])
{
    int sd, ad;
    char buff[1024];
    struct sockaddr_in cliaddr, servaddr;
    struct hostent *h;
    h = gethostbyname(argv[1]);
    bzero(&servaddr, sizeof(servaddr));

    servaddr.sin_family = AF_INET;
    memcpy((char *)&servaddr.sin_addr.s_addr, h->h_addr_list[0], h->h_length);
    servaddr.sin_port = htons(1507);
    sd = socket(AF_INET, SOCK_STREAM, 0);
    connect(sd, (struct sockaddr *)&servaddr, sizeof(servaddr));
    recv(sd, buff, sizeof(buff), 0);
    printf("Day time of server is: %s\n", buff);
    return 0;
}
```

Output:

Server:



Client:


(1) WhatsApp
Meet - wvu-vpcu-coy
Dr.P.saravanan _Batch 2_DAY 4_J
us-west-1.console.aws.amazon.com/cloud9/ide/290811e1727844f299105280c29ce69c?#
Imp material
YouTube
Google Keep
contest
games
SRM
GitHub
Other bookmarks
Reading list
File Edit Find View Go Run Tools Window Support
Preview
Run
Go to Anything (Ctrl-P)
RA1911026010027
RA1911026010029
RA1911026010030
RA1911026010031
RA1911026010032
RA1911026010033
Exp3
Exp4
Exp5
Client
a.out
dtc
dtClient.c
Server
a.out
dtServer.c
RA1911026010034
RA1911026010035
RA1911026010036
RA1911026010037
RA1911026010038
RA1911026010040
RA1911026010041
RA1911026010042
RA1911026010043
RA1911026010044
RA1911026010045
dtServer.c
dtClient.c
bash - "ip-172-31-14-10"
./a.out - "ip-172-31-14-10"
Psaravanan:~/environment/RA1911026010033/Exp5/Client $ gcc dtClient.c -o dtc
dtClient.c: In function 'main':
dtClient.c:15:5: warning: implicit declaration of function 'bzero' [-Wimplicit-function-declaration]
bzero(&servaddr, sizeof(servaddr));
dtClient.c:15:5: warning: incompatible implicit declaration of built-in function 'bzero'
dtClient.c:18:5: warning: implicit declaration of function 'memcpy' [-Wimplicit-function-declaration]
memcpy((char *)&servaddr.sin_addr.s_addr, h->h_addr_list[0], h->h_length);
dtClient.c:18:5: warning: incompatible implicit declaration of built-in function 'memcpy'
dtClient.c:18:5: note: include '<string.h>' or provide a declaration of 'memcpy'
Psaravanan:~/environment/RA1911026010033/Exp5/Client $ ./dtc 172.31.14.10
Day time of server is: Mon Aug 16 09:38:57 2021
Psaravanan:~/environment/RA1911026010033/Exp5/Client $
AWS: (not connected)
Type here to search
28°C Rain
ENG
15:15
16-08-2021