

Name : Harshvardhan N. Patil
Roll no. : 33346
Class : TE 11
Batch : M 11

Assignment : 7b

Code:

server.c

```
#include<stdio.h>
#include<unistd.h>
#include<sys/ipc.h>
#include<sys/shm.h>

int main()
{

// ftok to generate a unique id
key_t key=ftok(".",65);

// shmget returns an identifier in shmid
int shmid=shmget(key,1024,0666|IPC_CREAT);

//shmat to attach to shared memory
char *str=(char *)shmat(shmid,NULL,0);
printf("Enter the data to send from server to client :");
fgets(str,1024,stdin);
printf("\nData written in shared memory :%s\n",str);

//shmdt to detach from shared memory
shmdt(str);

return 0;
}
```

client.c

```
#include<stdio.h>
#include<unistd.h>
#include<sys/ipc.h>
#include<sys/shm.h>

int main()
{
```

```
key_t key=ftok(".",65);

int shmid=shmget(key,1024,0666|IPC_CREAT);

char * str=(char *)shmat(shmid,NULL,0);

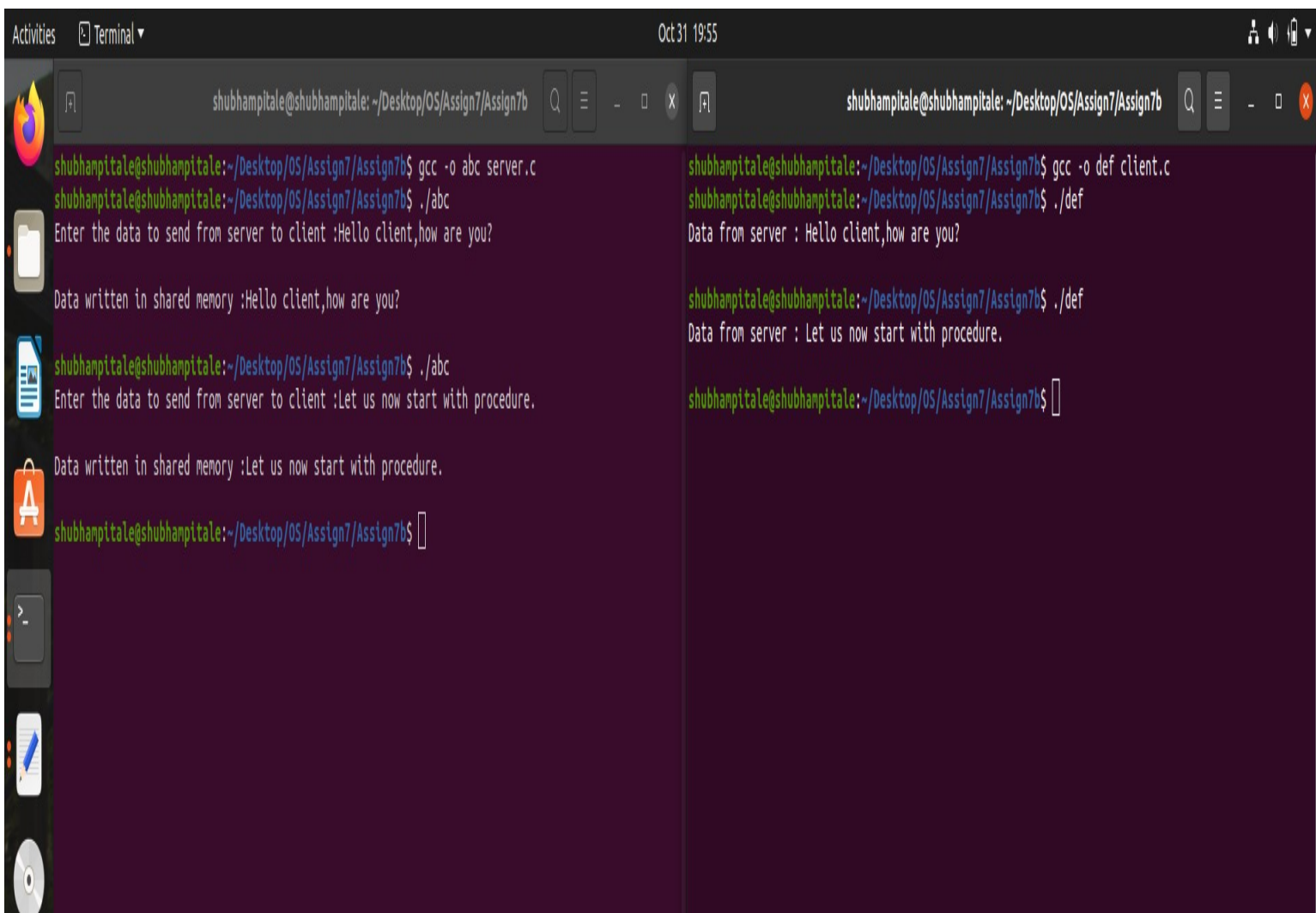
printf("Data from server : %s\n",str);

shmdt(str);

// destroy the shared memory
shmctl(shmid,IPC_RMID,NULL);

return 0;
}
```

Output:



```
shubhampitale@shubhampitale: ~/Desktop/OS/Assign7/Assign7b
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$ gcc -o abc server.c
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$ ./abc
Enter the data to send from server to client :Hello client,how are you?
Data written in shared memory :Hello client,how are you?
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$ ./abc
Enter the data to send from server to client :Let us now start with procedure.
Data written in shared memory :Let us now start with procedure.
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$

shubhampitale@shubhampitale: ~/Desktop/OS/Assign7/Assign7b
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$ gcc -o def client.c
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$ ./def
Data from server : Hello client,how are you?
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$ ./def
Data from server : Let us now start with procedure.
shubhampitale@shubhampitale:~/Desktop/OS/Assign7/Assign7b$
```