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Course : MCS 172 – Lab Test 03

Question 01 - A:

Ubuntu 20.04 LTS

```
kumarraj@kumarraj:~/MCS_172/LabTest3$ ls
File1.txt a.out excute execution.c fdBhv.c q1.sh rd reader.c writer.c wrt
kumarraj@kumarraj:~/MCS_172/LabTest3$ bash q1.sh
Enter the name of dir to create:CATT3
cp: -r not specified; omitting directory 'CATT3'
Listing all current open files:COMMAND PID USER FD TYPE DEVICE SIZE NODE NAME
init 1 root cwd DIR 0,2 512 23925373020436272 /
init 1 root rtd DIR 0,2 512 23925373020436272 /
init 1 root txt REG 0,2 631968 97108866965206885 /init
init 1 root mem REG 0,0 30565 /init (path dev=0,2, inode=97108866965206885)
init 1 root NOFD /proc/1/fd (opendir: Permission denied)
init 7 root cwd DIR 0,2 512 23925373020436272 /
init 7 root rtd DIR 0,2 512 23925373020436272 /
init 7 root txt REG 0,2 631968 97108866965206885 /init
init 7 root mem REG 0,0 30565 /init (path dev=0,2, inode=97108866965206885)
init 7 root NOFD /proc/7/fd (opendir: Permission denied)
init 203 root cwd DIR 0,2 512 23925373020436272 /
init 203 root rtd DIR 0,2 512 23925373020436272 /
init 203 root txt REG 0,2 631968 97108866965206885 /init
init 203 root mem REG 0,0 30565 /init (path dev=0,2, inode=97108866965206885)
init 203 root NOFD /proc/203/fd (opendir: Permission denied)
kumarraj@kumarraj:~/MCS_172/LabTest3$ ls
CATT3 File1.txt a.out excute execution.c fdBhv.c q1.sh rd reader.c writer.c wrt
kumarraj@kumarraj:~/MCS_172/LabTest3$
```

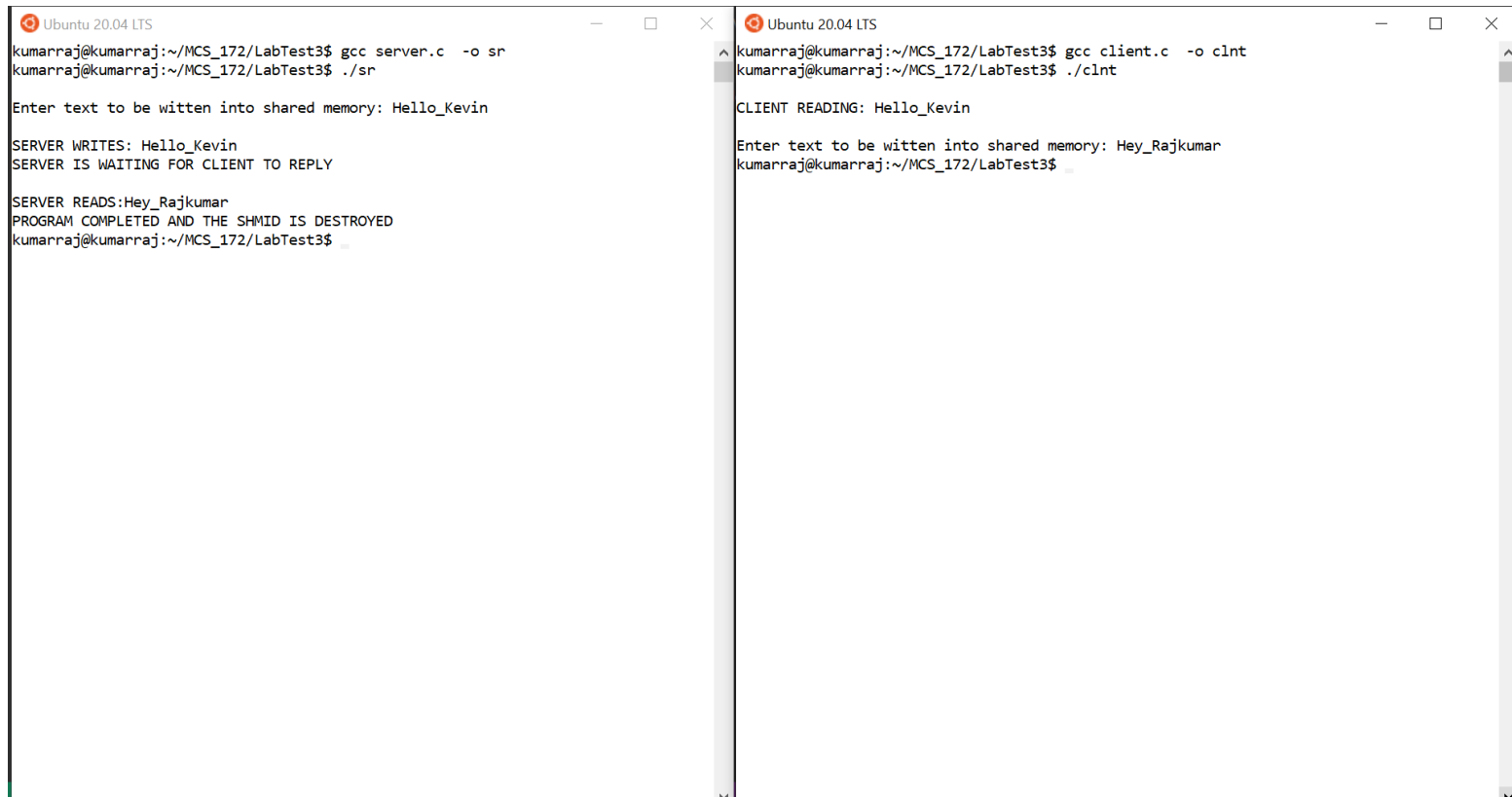
Question 01 - B:

Ubuntu 20.04 LTS

```
kumarraj@kumarraj:~/MCS_172/LabTest3$ gcc execution.c -o excute
kumarraj@kumarraj:~/MCS_172/LabTest3$ gcc fdBhv.c -o fdbh
fdBhv.c: In function 'fd_exec':
fdBhv.c:84:5: warning: null argument where non-null required (argument 2) [-Wnonnull]
   84 |     execev("./excute", NULL);
      |     ~~~~~^
kumarraj@kumarraj:~/MCS_172/LabTest3$ ./fdbh
=====
Menu
=====
1.Fork
2.Exec
3.Exit
=====
Enter your choice:1
File opened succesfully...
This is child writing to the file with fd = 3
This is parent writing to the file with fd = 3

Enter your choice:2
File opened succesfully...
FD of current fdBhv is = 4
Hey raj, you are currently executing execution.c program
PID of execution.c = 470
FD of new prg execution.c is = 4
kumarraj@kumarraj:~/MCS_172/LabTest3$ cat File.txt
cat: File.txt: Permission denied
kumarraj@kumarraj:~/MCS_172/LabTest3$ chmod 744 *
kumarraj@kumarraj:~/MCS_172/LabTest3$ cat File.txt
Raj Kumar
kumarraj@kumarraj:~/MCS_172/LabTest3$ cat File2.txt
EXEC
This is from exec
kumarraj@kumarraj:~/MCS_172/LabTest3$
```

Question 02:



```
Ubuntu 20.04 LTS
kumarraj@kumarraj:~/MCS_172/LabTest3$ gcc server.c -o sr
kumarraj@kumarraj:~/MCS_172/LabTest3$ ./sr

Enter text to be witten into shared memory: Hello_Kevin

SERVER WRITES: Hello_Kevin
SERVER IS WAITING FOR CLIENT TO REPLY

SERVER READS:Hey_Rajkumar
PROGRAM COMPLETED AND THE SHMID IS DESTROYED
kumarraj@kumarraj:~/MCS_172/LabTest3$
```

```
Ubuntu 20.04 LTS
kumarraj@kumarraj:~/MCS_172/LabTest3$ gcc client.c -o clnt
kumarraj@kumarraj:~/MCS_172/LabTest3$ ./clnt

CLIENT READING: Hello_Kevin

Enter text to be witten into shared memory: Hey_Rajkumar
kumarraj@kumarraj:~/MCS_172/LabTest3$
```