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File related System Call:

1. write() system call:

```
#include<stdio.h>
int main()
{
//write(1,"welcome",7);
//write(1,"welcome",5);
//write(1,"welcome",15);
/*int n=write(1,"welcome",7);//write function return count
printf("Value of n is:%d",n);
*/
write(1,"welcome\n",8);
return 0;
}
```

Output:

```
lm@lm-VirtualBox:~$ gcc write.c
lm@lm-VirtualBox:~$ ./a.out
welcomelm@lm-VirtualBox:~$ gcc write.c
lm@lm-VirtualBox:~$ ./a.out
welcolm@lm-VirtualBox:~$ gcc write.c
lm@lm-VirtualBox:~$ ./a.out
welcome—————;(lm@lm-VirtualBox:~$ gcc write.c
lm@lm-VirtualBox:~$ ./a.out
welcomeValue owelcomeValue of n is:7lm@lm-VirtualBox:~$ gcc write.c
lm@lm-VirtualBox:~$ ./a.out
welcomeValue of n is:7lm@lm-VirtualBox:~$ gcc write.c
lm@lm-VirtualBox:~$ ./a.out
welcome
lm@lm-VirtualBox:~$
```

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2. read() System Call:

```
#include<stdio.h>
#include<unistd.h>
int main()
{
/*
char b[30];
read(0,b,10);
write(1,b,10);
return 0;
*/
```

```
char b[30];
int n=read(0,b,30);
write(1,b,n);
return 0;
```

```
}
```

/*OUTPUT-

lm@lm-VirtualBox:~\$ gcc read.c

lm@lm-VirtualBox:~\$./a.out

I use read system call

I use readlm@lm-VirtualBox:~\$ system call

system: command not found

lm@lm-VirtualBox:~\$ gcc read.c

lm@lm-VirtualBox:~\$./a.out

0123456789

0123456789lm@lm-VirtualBox:~\$

lm@lm-VirtualBox:~\$ gcc read.c

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```
lm@lm-VirtualBox:~$ ./a.out
```

```
0123456789987654
```

```
0123456789lm@lm-VirtualBox:~$ 987654
```

```
987654: command not found
```

```
lm@lm-VirtualBox:~$ gcc read.c
```

```
lm@lm-VirtualBox:~$ ./a.out
```

```
12345
```

```
12345
```

```
▪ ❖lm@lm-VirtualBox:~$ gedit read.c
```

```
lm@lm-VirtualBox:~$ gcc read.c
```

```
lm@lm-VirtualBox:~$ ./a.out
```

```
1234567890567
```

```
1234567890567
```

```
lm@lm-VirtualBox:~$ gcc read.c
```

```
lm@lm-VirtualBox:~$ ./a.out
```

```
1223345566778899900876554433222111````1134456566dfgghhhjjjhzcvcbz  
gadadxczfafdz
```

```
122334556677889990087655443322lm@lm-VirtualBox:~$
```

```
2111````1134456566dfgghhhjjjhzcvcbzgadadxczfafdz
```

```
21111134456566dfgghhhjjjhzcvcbzgadadxczfafdz: command not found
```

```
lm@lm-VirtualBox:~$
```

```
*/
```

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3. open() System Call:

open.c

```
#include<stdio.h>
#include <fcntl.h>
#include<unistd.h>
#include<unistd.h>
#include<sys/types.h>
#include<sys/stat.h>
int main()
{
/*
int n,fd;
char buf[50];
fd=open("test.txt",O_RDONLY);// test.txt file exist
n=read(fd,buf,10);
write(1,buf,10);
*/
/*
int n,fd,fd1;
char buf[50];
fd=open("test.txt",O_RDONLY);// test.txt file exist
n=read(fd,buf,10);
fd1=open("target",O_CREAT|O_WRONLY,0642);
write(fd1,buf,n);
*/
int n,fd1;
char buf[50];
//fd=open("test.txt",O_RDONLY);// test.txt file exist
n=read(0,buf,20);
fd1=open("target",O_WRONLY|O_APPEND);
write(fd1,buf,n);
```

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```
return 0;  
}
```

```
/*
```

OUTPUT-

```
lm@lm-VirtualBox:~$ cat test.txt  
This is test.text file  
lm@lm-VirtualBox:~$ gcc open.c  
lm@lm-VirtualBox:~$ cat test.txt  
This is test.text file  
lm@lm-VirtualBox:~$ ./a.out  
This is te  
lm@lm-VirtualBox:~$ gcc open.c  
lm@lm-VirtualBox:~$ ./a.out  
lm@lm-VirtualBox:~$ cat target.txt  
cat: target.txt: No such file or directory  
lm@lm-VirtualBox:~$ cat target  
This is te  
lm@lm-VirtualBox:~$ cat target  
This is te  
lm@lm-VirtualBox:~$ gcc open.c  
lm@lm-VirtualBox:~$ ./a.out  
append target  
lm@lm-VirtualBox:~$ cat target  
This is te  
append target  
lm@lm-VirtualBox:~$
```

```
*/
```

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4. lseek() System Call:

lseek.c

```
#include<unistd.h>
#include<fcntl.h>
#include<sys/types.h>
#include<sys/stat.h>
int main()
{
    /**
    int n,f;
    char buff[50];
    f=open("test.txt",O_RDWR);
    read(f,buff,5);
    write(1,buff,5);
    lseek(f,5,SEEK_CUR);//skips 5 characters from the current position
    read(f,buff,2);
    write(1,buff,2);

    /**/
    /*
    int n,f;
    char buff[50];
    f=open("test.txt",O_RDWR);//This is test.text file
    read(f,buff,10);//This is te
    write(1,buff,10);
    lseek(f,5,SEEK_CUR);//skips 5 characters from the current position st.te
    read(f,buff,7);//xt file //when count is 10
    write(1,buff,7);

    return 0;
```

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*/

}

/*OUTPUT-

lm@lm-VirtualBox:~\$ cat test.txt

This is test.text file

lm@lm-VirtualBox:~\$ gcc lseek.c

lm@lm-VirtualBox:~\$./a.out

This is

*/

/*OUTPUT-

lm@lm-VirtualBox:~\$ gcc lseek.c

lm@lm-VirtualBox:~\$./a.out

This is text file te

lm@lm-VirtualBox:~\$ gcc lseek.c

lm@lm-VirtualBox:~\$./a.out

This is text file

*/