

# OS Assignment 1

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## Section 1: Instructions

In the location in which add2Float.c and addWrapper.c is present, run the following commands:

```
make  
./add2Floats
```

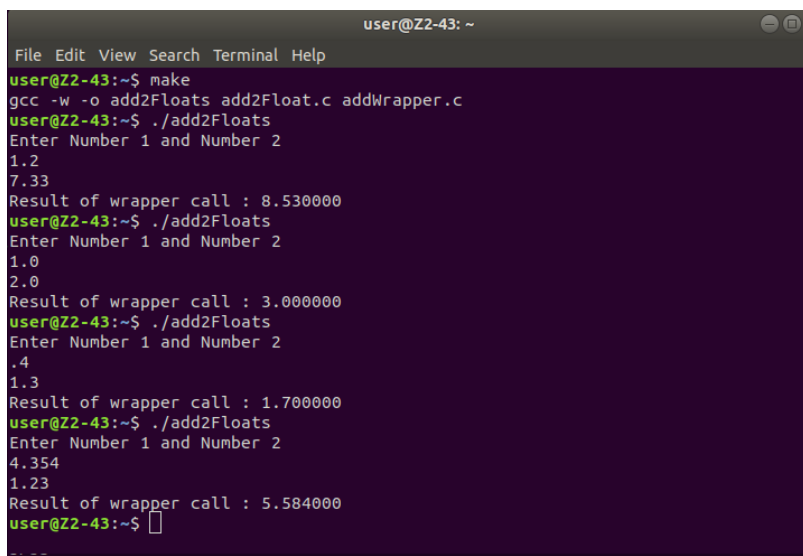
## Section 2: Files added and modified

1. /usr/src/linux-5.2.9/add\_syscall/add\_syscall.c
2. /usr/src/linux-5.2.9/add\_syscall/add\_syscall.h
3. /usr/src/linux-5.2.9/add\_syscall/Makefile
4. /usr/src/linux-5.2.9/Makefile
5. /usr/src/linux-5.2.9/arch/x86/entry/syscalls/syscall\_64.tbl
6. /usr/src/linux-5.2.9/include/asm-generic/syscalls.h
7. /usr/src/linux-5.2.9/include/linux/syscalls.h
8. /home/user/add2Float.c
9. /home/user/addWrapper.h
10. /home/user/addWrapper.c

## Section 3: Output

Following is the output:

1. 2 floats:  
(When  $\text{arg1} > \text{arg2}$  and vice versa)



```
user@Z2-43: ~  
File Edit View Search Terminal Help  
user@Z2-43:~$ make  
gcc -w -o add2Floats add2Float.c addWrapper.c  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
1.2  
7.33  
Result of wrapper call : 8.530000  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
1.0  
2.0  
Result of wrapper call : 3.000000  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
.4  
1.3  
Result of wrapper call : 1.700000  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
4.354  
1.23  
Result of wrapper call : 5.584000  
user@Z2-43:~$
```

2. When 1 or more numbers are negative:

```
user@Z2-43: ~  
File Edit View Search Terminal Help  
.4  
1.3  
Result of wrapper call : 1.700000  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
4.354  
1.23  
Result of wrapper call : 5.584000  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
-1  
2.5  
Negative number entered  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
5  
-8  
Negative number entered  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
-9.87  
-10.10  
Negative number entered  
user@Z2-43:~$
```

3. When input has a number out of bounds:

```
Second number is infiniteuser@Z2-43:~$ make  
gcc -w -o add2Floats add2Float.c addWrapper.c  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
3.5e39  
3  
First number is infinite  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
45  
3.4e39  
Second number is infinite  
user@Z2-43:~$
```

4. When sum is out of bounds:

```
Second number is infiniteuser@Z2-43:~$ make  
gcc -w -o add2Floats add2Float.c addWrapper.c  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
3.5e39  
3  
First number is infinite  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
45  
3.4e39  
Second number is infinite  
user@Z2-43:~$ ./add2Floats  
Enter Number 1 and Number 2  
3.4e38  
3.4e38  
Answer is out of boundsuser@Z2-43:~$
```