

Ex -
L -

```
# include <stdio.h>
```

```
int counter = 0;
```

```
void increment () {
```

```
    counter ++;
```

```
    printf ("Inside increment (): counter=%d\n",
```

```
}
```

```
i("After increment : counter=%d\n", counter);
```

```
void multiply () {
```

```
    counter *= 2;
```

```
    printf ("Inside multiply (): counter=%d\n", counter);
```

```
}
```

```
int main () {
```

```
    printf ("Initially: Counter=%d\n", counter);
```

```
    increment ();
```

```
    increment ();
```

```
    multiply ();
```

```
    printf ("In main () after function calls: counter=%d\n",
```

```
        counter);
```

```
    return 0;
```

```
}
```

Teacher's Signature

Code File Edit Selection View Go Run Terminal Window Help

main.c

```
C main.c X
C main.c > main()
1 #include <stdio.h>
2
3 int counter = 0;
4
5 void increment() {
6     counter++;
7     printf("Inside increment(): counter = %d\n", counter);
8 }
9
10 void multiply() {
11     counter *= 2;
12     printf("Inside multiply(): counter = %d\n", counter);
13 }
14
15 int main() {
16     printf("Initially: counter = %d\n", counter);
17
18     increment();
19     increment();
20     multiply();
21
22     printf("In main() after function calls: counter = %d\n", counter);
23
24 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

- athaygupta@ibhays-MacBook-Air main.c % gcc main.c
- athaygupta@ibhays-MacBook-Air main.c % ./a.out

Initially: counter = 0
Inside increment(): counter = 1
Inside increment(): counter = 2
Inside multiply(): counter = 4
In main() after function calls: counter = 4

athaygupta@ibhays-MacBook-Air main.c %

Ln 14, Col 1 Spaces: 4 LF

This screenshot shows a development environment using Visual Studio Code (VS Code) on a Mac. The interface includes a dark-themed sidebar with icons for file operations like Open Editors, Main, and Explorer. The main workspace displays a C language file named 'main.c' with code demonstrating function calls and their side effects on a shared variable. The terminal below shows the execution of the program, including the compilation with 'gcc' and the execution of the binary 'a.out'. The terminal output shows the initial value of 'counter' as 0, followed by increments from 1 to 2 via the 'increment()' function, and a multiplication by 2 via the 'multiply()' function, resulting in a final value of 4. The status bar at the bottom indicates the current line (Ln 14), column (Col 1), and the number of spaces (Spaces: 4). The keyboard visible at the bottom is a standard Apple keyboard.