**Studio 15**

1. **Names of the people:** Sayali Patil
2. **Output:**

[sayali.patil@linuxlab010 studio15]$ ./dense\_mm 1000

Generating matrices...

Multiplying matrices...

Multiplication done!

[sayali.patil@linuxlab010 studio15]$ ./dense\_mm 1000

Generating matrices...

Multiplying matrices...

^C

[sayali.patil@linuxlab010 studio15]$

1. **Output with signal handler:**

[sayali.patil@linuxlab010 studio15]$ ./sig\_dense\_mm 1000

Generating matrices...

Multiplying matrices...

^CEntered signal handling function

^CEntered signal handling function

^CEntered signal handling function

^CEntered signal handling function

^CEntered signal handling function

Multiplication done!

Number of times signal handler is called is: 5

1. **Evidence:**

When we interrupt the program, the program simply handles the interrupts and continue running from that point. At the end, it prints out possible interrupts while printing particular integers that the program encountered and handled.

1. **Output:**
2. For dense\_mm:

Generating matrices...

Multiplying matrices...

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

Multiplication done!

Number of times signal handler is called is: 8

1. For parallel\_dense\_mm:

[sayali.patil@linuxlab010 studio15]$ ./parallel\_dense\_mm 1000 Generating matrices...

Multiplying matrices...

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

^Chandler called

Multiplication done!

Number of times signal handler is called is: 14

1. For sing:

[sayali.patil@linuxlab010 studio15]$ ./sing 100000

The Road goes ever on and on

Down from the door where it began.

Now far ahead the Road has gone,

And I must follow, if I can,

Pursuing it with eager feet,

Until it joins some larger way,

Where many paths and errands meet.

And whither then? I cannot say.

-Bilbo, The Lord of the Rings

The Road goes ever on and on

Down from the door where it began.

Now far ahead the Road has gone,

And I must follow, if I can,

Pursuing it with eager feet,

Until it joins some larger way,

Where many paths and errands meet.

And whither then? I cannot say.

-Bilbo, The Lord of the Rings

Number of times signal handler is called is: 85

(The poem was printed 100000 times, I have truncated the output here)

1. For sort:

[sayali.patil@linuxlab010 studio15]$ ./sort 1000000

Generating array...

Sorting array...

^Chandler called

^Chandler called

Sort done!

Number of times signal handler is called is: 2

There weren’t any problems because of message output within signal handler.