

Pre-Requisites Workshop Report

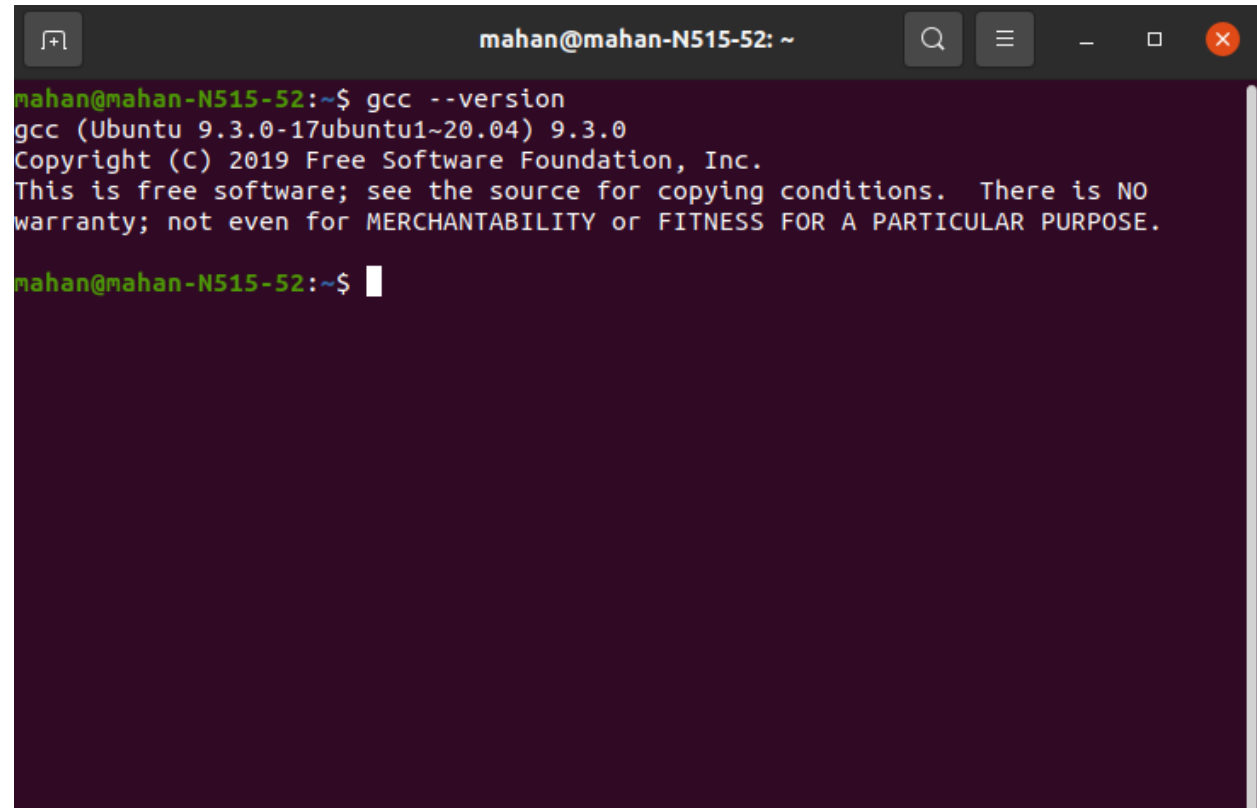
Student Id: 2052261

Student Name: Mahan Timalena

1) Verifying gcc compiler installer

Code: gcc --version

Output:

A terminal window with a dark purple background and a light gray title bar. The title bar contains the text 'mahan@mahan-N515-52: ~' and standard window control buttons (search, menu, close). The terminal shows the command 'gcc --version' being executed, followed by its output: 'gcc (Ubuntu 9.3.0-17ubuntu1~20.04) 9.3.0', 'Copyright (C) 2019 Free Software Foundation, Inc.', and a disclaimer about warranty. The prompt 'mahan@mahan-N515-52:~\$' is visible at the bottom of the output.

```
mahan@mahan-N515-52:~$ gcc --version
gcc (Ubuntu 9.3.0-17ubuntu1~20.04) 9.3.0
Copyright (C) 2019 Free Software Foundation, Inc.
This is free software; see the source for copying conditions.  There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

mahan@mahan-N515-52:~$
```

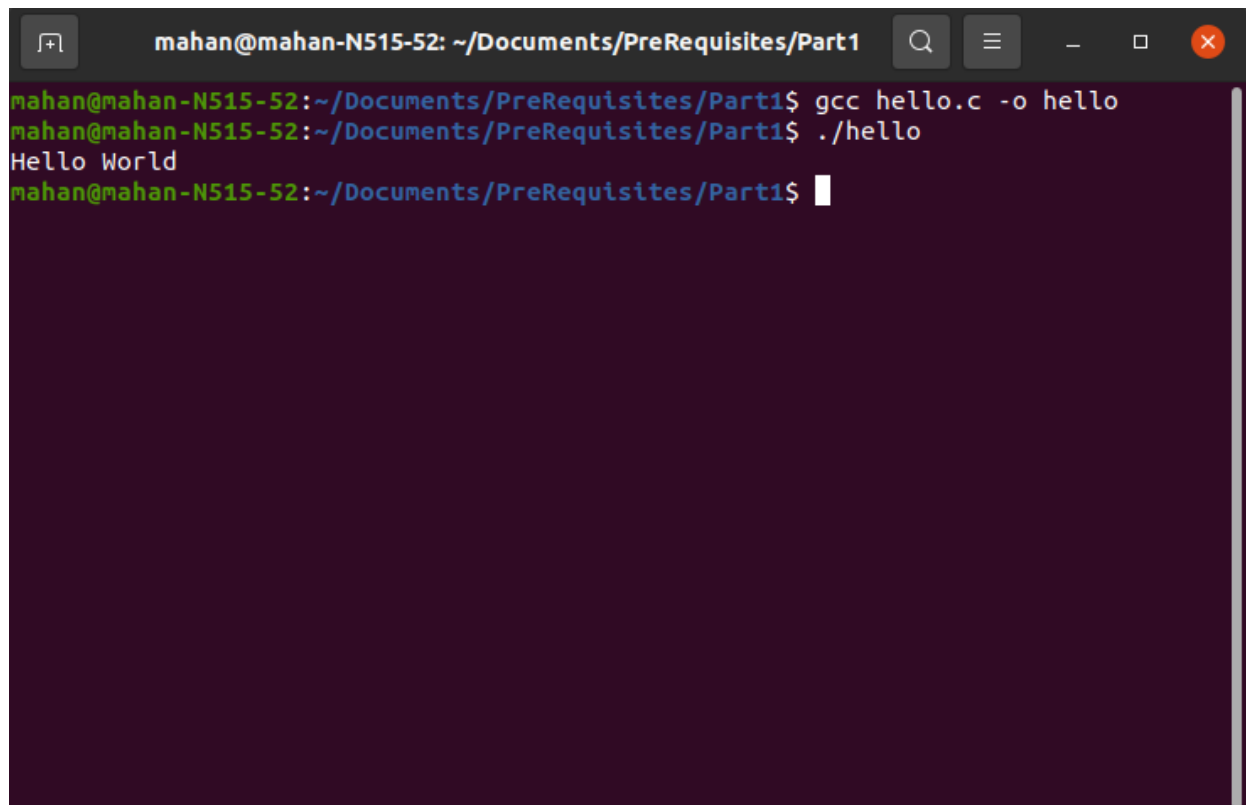
2) Hello World

Code:

```
#include<stdio.h>

int main()
{
    printf("Hello World\n");
    return 0;
}
```

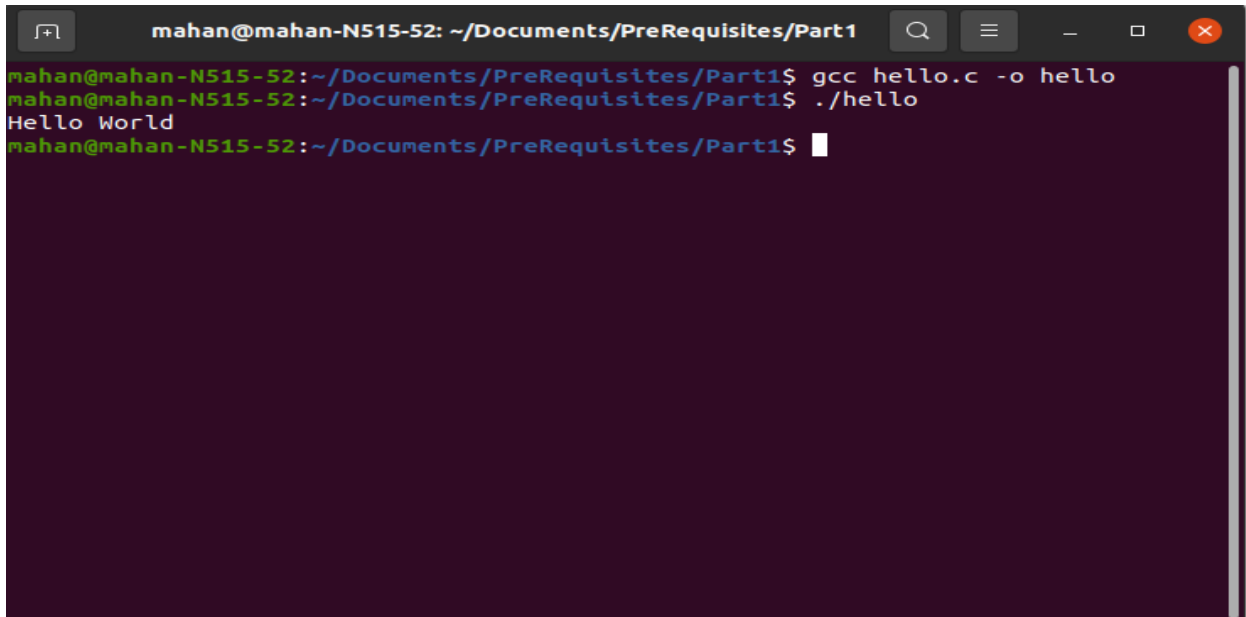
Output:

A terminal window with a dark purple background. The title bar shows the user 'mahan' on a machine named 'mahan-N515-52' in the directory '~/Documents/PreRequisites/Part1'. The terminal contains three lines of text: a command to compile 'hello.c' into 'hello' using 'gcc', a command to run 'hello' using './hello', and the output 'Hello World' followed by a new line and a prompt character.

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part1
mahan@mahan-N515-52:~/Documents/PreRequisites/Part1$ gcc hello.c -o hello
mahan@mahan-N515-52:~/Documents/PreRequisites/Part1$ ./hello
Hello World
mahan@mahan-N515-52:~/Documents/PreRequisites/Part1$
```

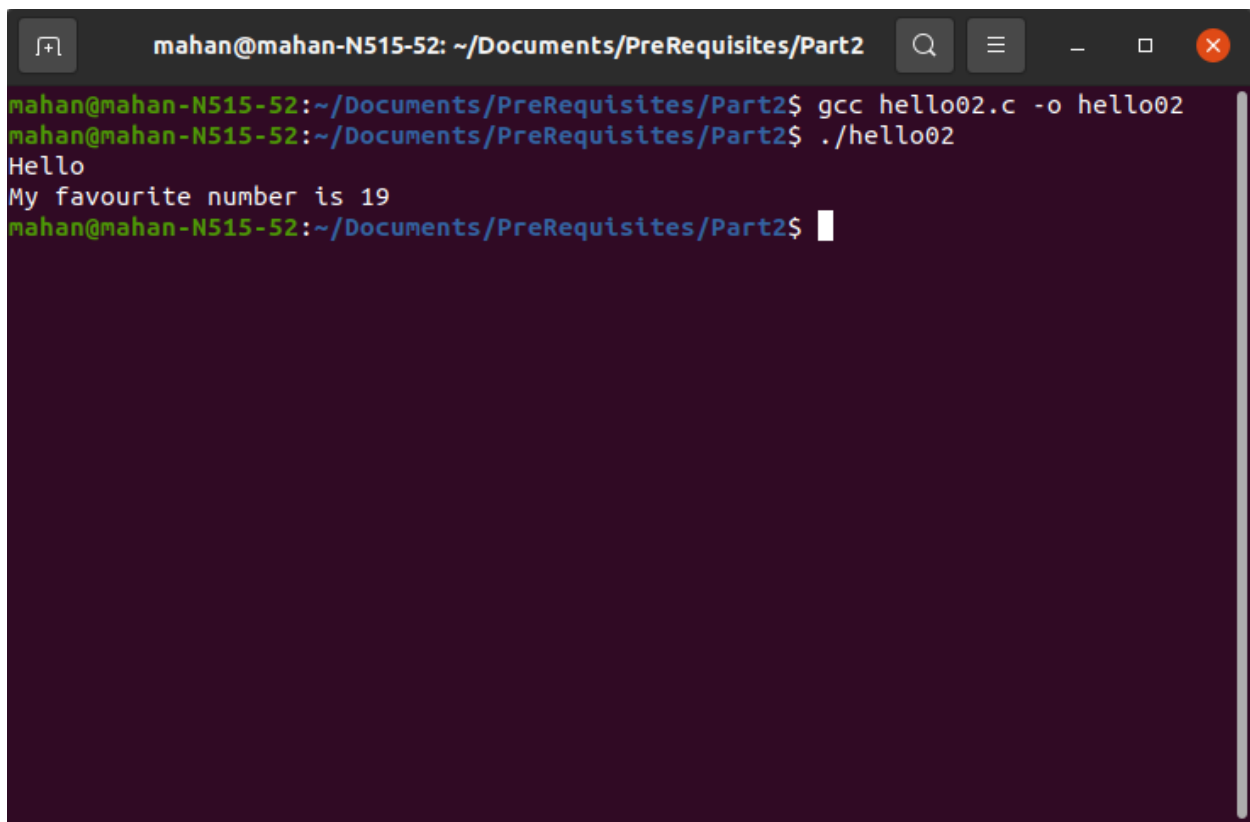
Part Two

1) Hello1.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part1
mahan@mahan-N515-52:~/Documents/PreRequisites/Part1$ gcc hello.c -o hello
mahan@mahan-N515-52:~/Documents/PreRequisites/Part1$ ./hello
Hello World
mahan@mahan-N515-52:~/Documents/PreRequisites/Part1$
```

2) Hello2.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc hello02.c -o hello02
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./hello02
Hello
My favourite number is 19
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

3) Control01.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc control01.c -o control01
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./control01
0,1,2,3,4,
5,6,7,8,9,10,11,12,13,14,
custard
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

4) Types01.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc types01.c -o types01
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./types01
10 / 3 = 3
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

5) Types03.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc types03.c -o types03
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./types03
10.000000 / 3.000000 = 3.333333
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

6) Types04.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc types04.c -o types04
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./types04
10.000000 / 3.000000 = 3.333333
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

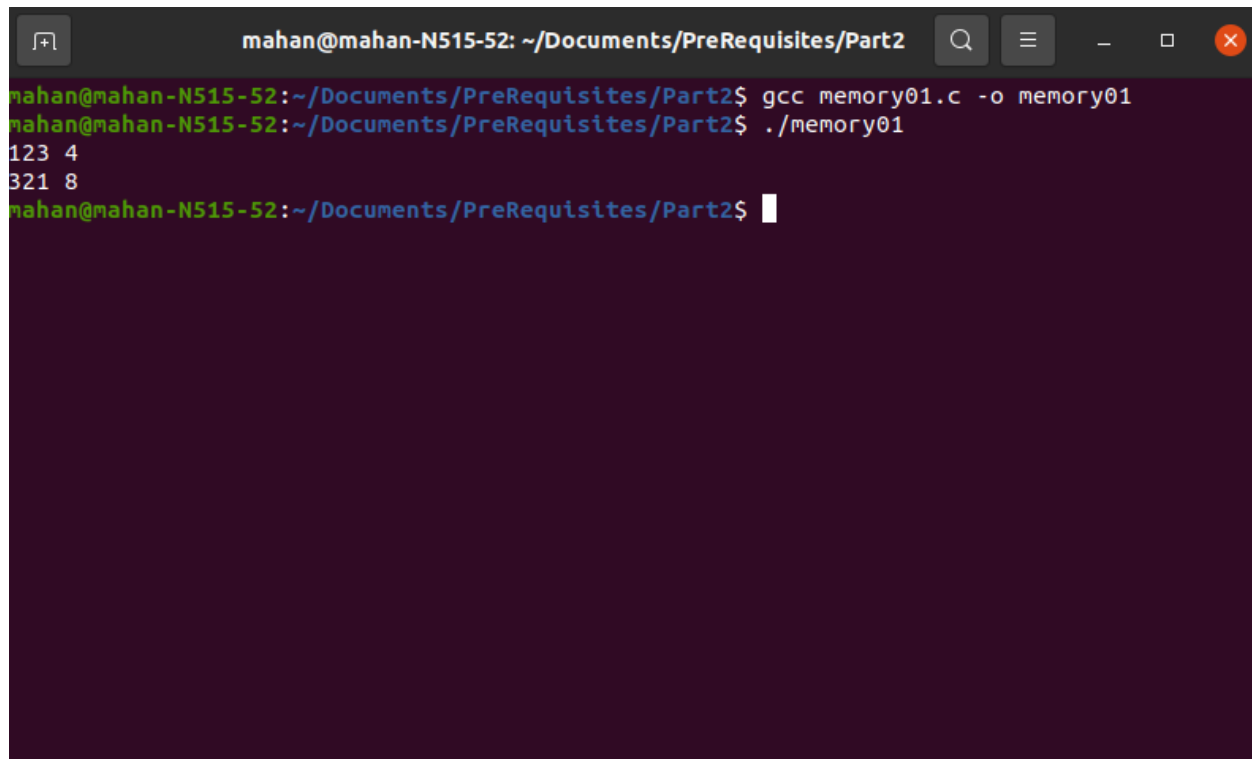
7) Types05.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc types05.c -o types05
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./types05
There are no booleans in c
0
1
1
0
0
1
e=1
f=0
e=true
f=false
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

8) Types06.c

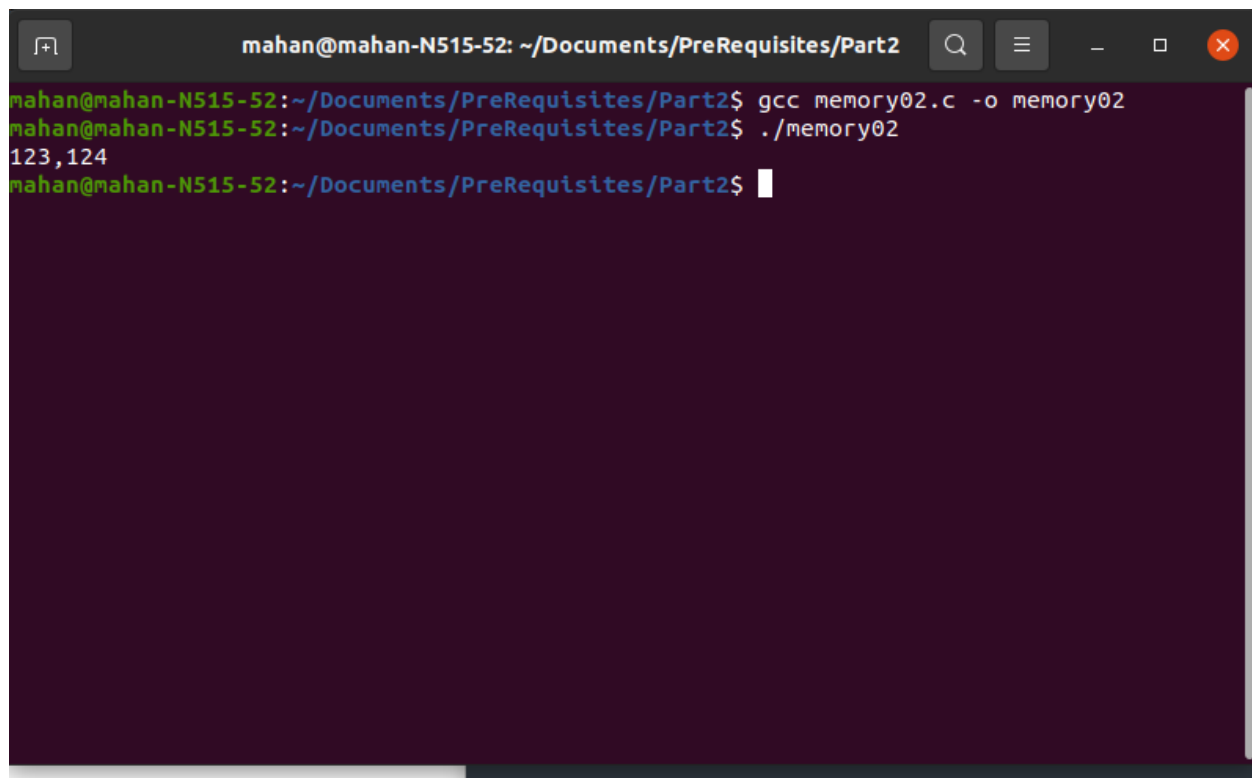
```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc types06.c -o types06
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./types06
Strings are just arrays of chars
hello kevan
Look in /usr/include/string.h for functions
that can be applied. Each has a man page.
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

9) Memory01.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory01.c -o memory01
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory01
123 4
321 8
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

10) Memory02.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory02.c -o memory02
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory02
123,124
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```


11) Memory03.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory03.c -o memory03
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory03
123,124
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

12) Memory04.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory04.c -o memory04
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory04
124,124
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

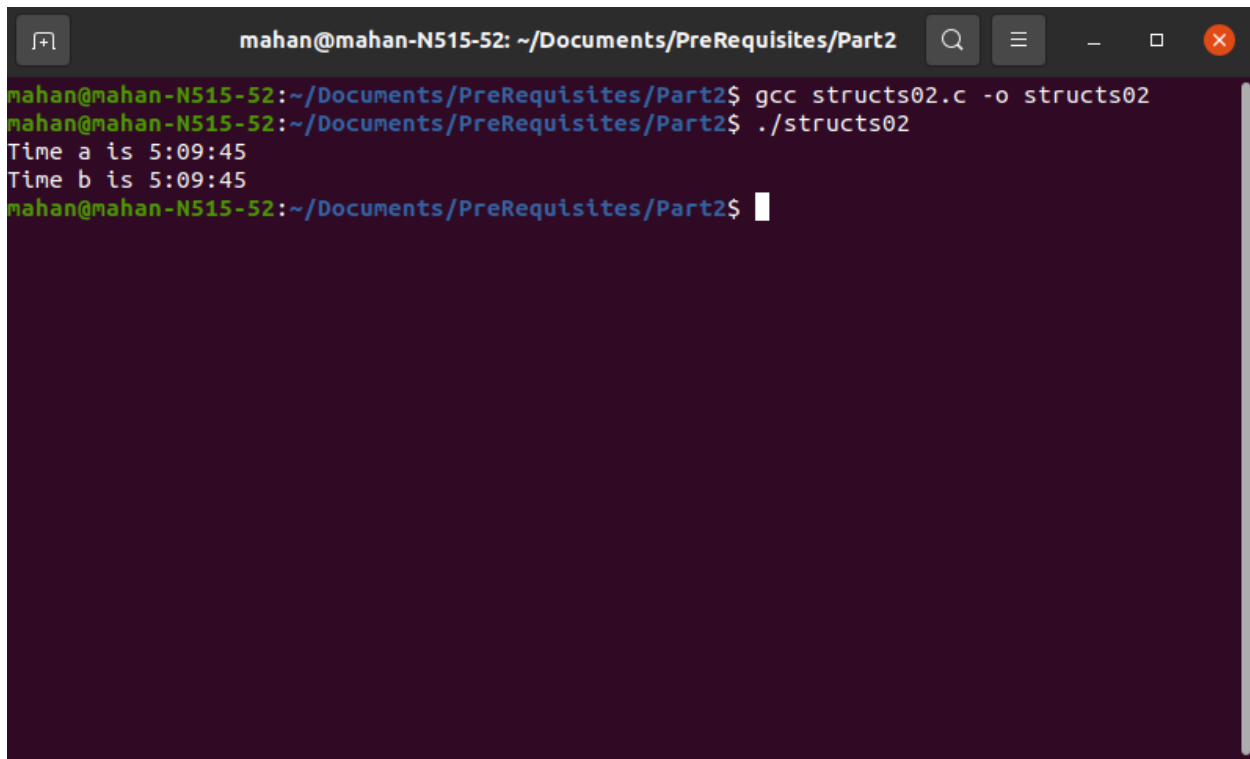
13) Memory05.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory05.c -o memory05
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory05
124,124
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

14) Structs01.c

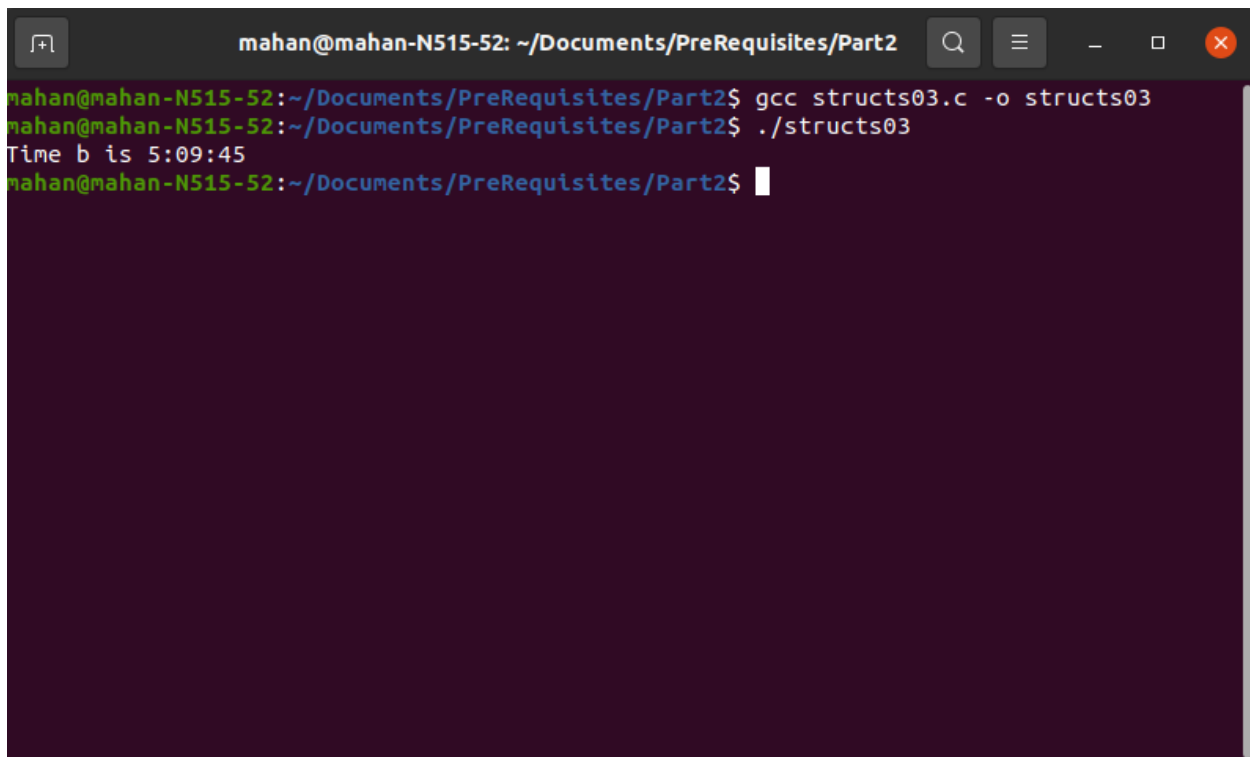
```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc structs01.c -o structs01
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./structs01
Time a is 5:09:45
Time b is 5:09:45
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

15) Structs02.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc structs02.c -o structs02
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./structs02
Time a is 5:09:45
Time b is 5:09:45
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

16) Structs03.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc structs03.c -o structs03
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./structs03
Time b is 5:09:45
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

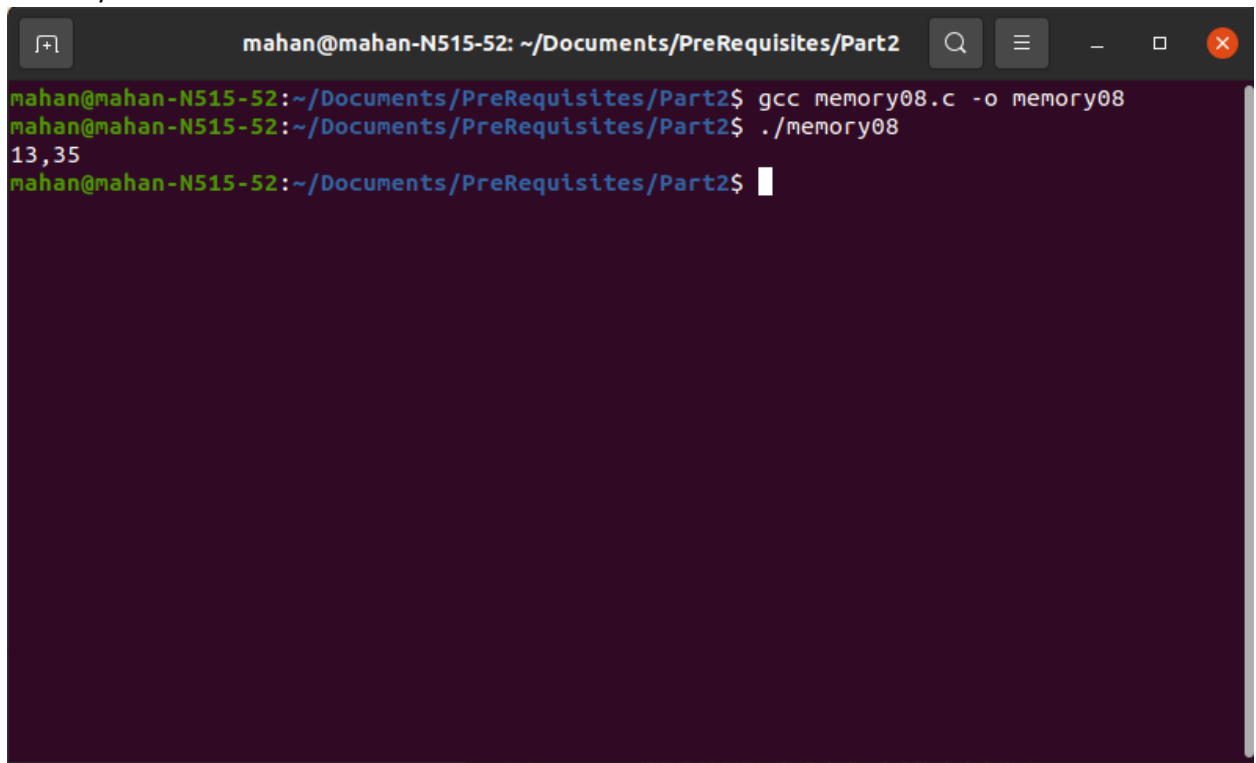
17) Memory06.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory06.c -o memory06
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory06
12,34,8
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

18) Memory07.c

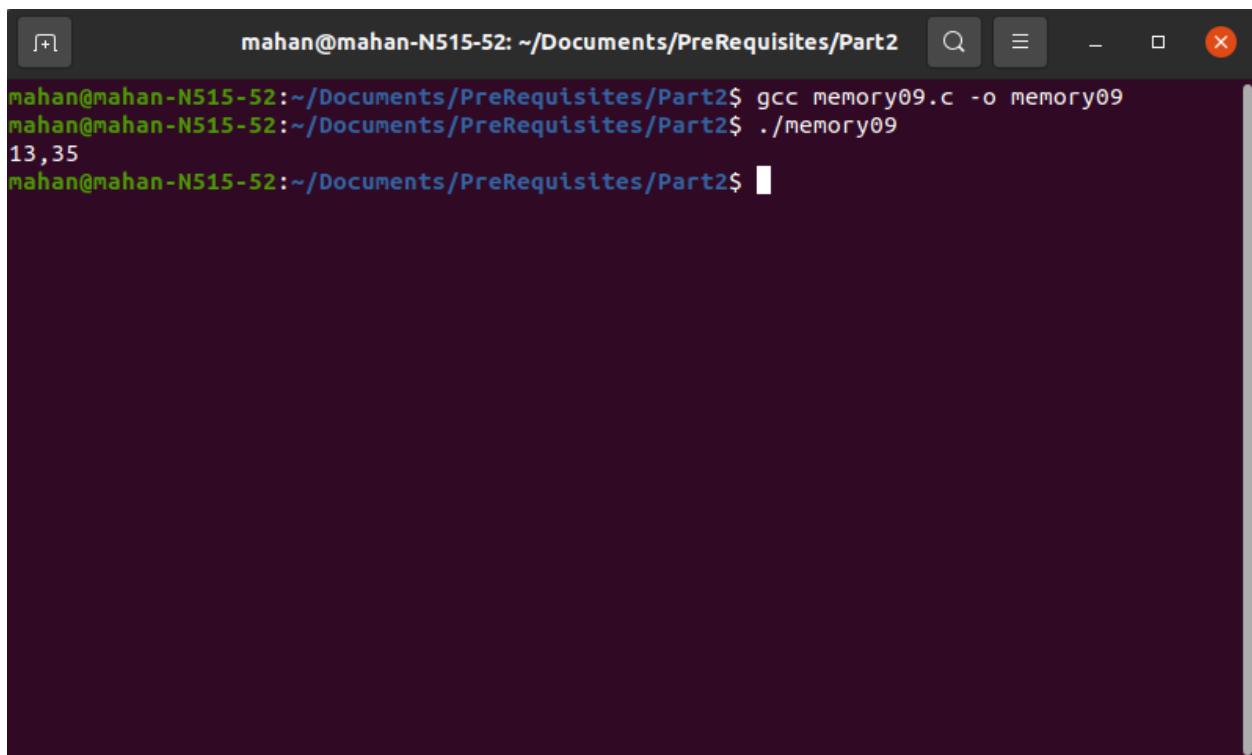
```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory07.c -o memory07
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory07
12,34,8
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

19) Memory08.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory08.c -o memory08
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory08
13,35
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

20) Memory09.c



```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory09.c -o memory09
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory09
13,35
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

21) Memory10.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory10.c -o memory10
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory10
8
4
0,0
1,2
2,4
3,6
4,8
5,10
6,12
7,14
8,16
9,18
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

22) Memory11.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory11.c -o memory11
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory11
0,0
1,2
2,4
3,6
4,8
5,10
6,12
7,14
8,16
9,18
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

23) Memory12.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory12.c -o memory12
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory12
0,1
1,3
2,5
3,7
4,9
5,11
6,13
7,15
8,17
9,19
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

24) Memory13.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory13.c -o memory13
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory13
0,1
1,3
2,5
3,7
4,9
5,11
6,13
7,15
8,17
9,19
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```

25) Memory14.c

```
mahan@mahan-N515-52: ~/Documents/PreRequisites/Part2
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ gcc memory14.c -o memory14
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$ ./memory14
0,1
1,3
2,5
3,7
4,9
5,11
6,13
7,15
8,17
9,19
mahan@mahan-N515-52:~/Documents/PreRequisites/Part2$
```