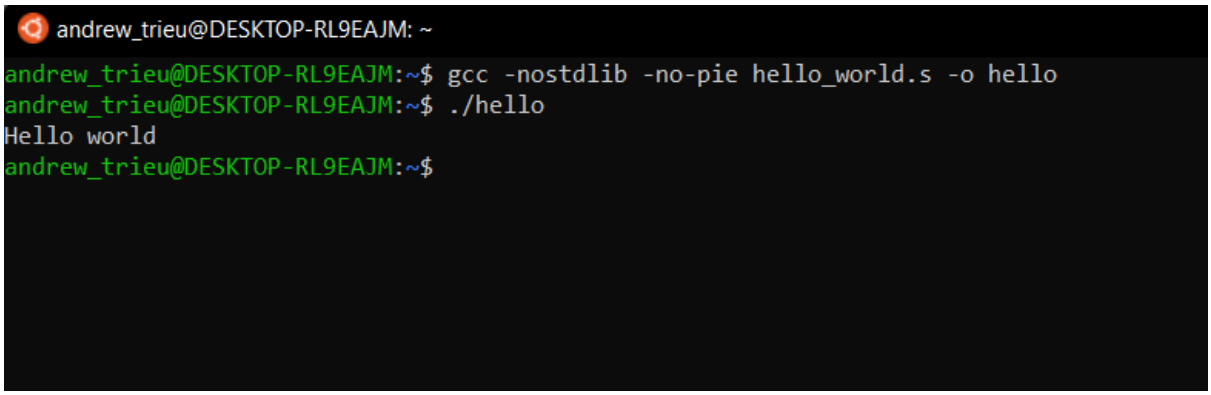
2.



3.

a) msg: .ascii "Hello world\n\0"

syscall_write_opcode: .quad 1

b) movq $60, %rax
movq $0, %rdi
syscall

4. The program calculates x=[(N/x)+x]*x using 10 loops.

a)

```
real    0m0.001s
user    0m0.001s
sys     0m0.000s
```

b)

	Add	Div	Sub	Mul
Floating point	1.094s	2.372s	1.092s	1.104s
Integer	1.098s	18.320s	1.091s	1.102s

c) There are significant difference between the 2 data types when it comes to division (due to remainders).