

CS322- Lab 5

Assembly language Programming-32bit assembly

The purpose of the lab is to get an understanding of the Assembly language Programming process (32 bit). Your task is to re-create the game that you developed in Lab4 with 32 bit assembly. In this lab we use Netwide Assembler(nasm)

(Various sample programs are given, first step is go through the asm files, book and understand the various input /output and computation steps)

Install Nasm(Ubuntu 18.04):

```
sudo apt install nasm
```

Useful commands

Assemble, link a file for i386 Linux

```
nasm -f elf -o hello-elf.o hello.asm
```

or

```
nasm -f elf hello.asm
```

Now build the executable, "hello":

```
ld -m elf_i386 hello.o -o hello
```

others useful

```
objdump -x hello.o
```

```
hexdump -C hello.o
```

```
gcc -m32 program_name.c
```

Your Lab Assignment 5 (100 points)

Submission (single zip file with a short report of your game (doc/pdf) and lab5.asm)

<https://u.pcloud.com/#page=puplink&code=hTq7ZLy1ouTL3voV3yUN6nkCX7z7Mj6L7>

. Due on 8th October 11 PM.