

1_2

Command to Run

```
@make
```

Make File Description

This line creates the object file using nasm. It takes the B.asm assembly code and converts it to B.o object file

```
@nasm -f elf64 B.asm
```

This line generates the executable named out

```
@gcc A.c B.o C.c -o out -no-pie
```

This line runs the executable

```
@./out
```

Give the input and view the output

Code-

- **A.c**
 - Main Function Calls **A()**
 - **A()** takes Long Input and Calls B. B is added as an extern as it is in an asm file
- **B.asm**
 - rdi is pushed into stack
 - lea just calculates the address, it doesn't actually access memory and stores it into rcx for the value in stack
 - Moving 1 into rax and rdx to denote write syscall and the first parameter
 - Moving rcx into rsi to give the long value
 - syscall is made which writes on stdout the long value as a string
 - A pointer is made for C in stack
 - Return takes to C

- C.c
 - `exit(0)` terminates the program