

Assembly Lab: Variables & Constants Flowchart

Start

Identify the variables needed

Two initialized variables: var1 = 10, var2 = 15
One uninitialized variable: result

Reserve memory for variables

Use .data section for var1 and var2
Use .bss section for result

Start writing the main program

Use .text section
Define _start: as the entry point

Move values of var1 and var2
into registers

Load var1 into eax
Load var2 into ebx

Perform the addition

Add eax and ebx
Result is now in eax

Store the result in memory

Save eax into result variable

Exit the program

Use syscall mov eax, 1 and int 0x80

Compile and link the code

Use:
nasm -f elf32 filename.asm
ld -m elf_i386 -o filename filename.o

Debug using GDB

Launch GDB
Set a watch on result to see the output

Finish