

ALP containing division, XOR, Left shift

section .text

global _start

_start:

Division:

mov ecx, msg-division

mov edx, len-division

mov ebx, 1

mov eax, 4

int 0x80

xor edx, edx

~~mov~~

mov eax, [num1]

mov ebx, [num2]

div ebx

xor ecx, ecx

xor edx, edx

call print_integer.

logic_XOR:

mov ecx, msg-XOR

mov edx, len-XOR

mov ebx, 1

mov eax, 4

int 0x80

mov eax, ~~ebx~~ [num1]

mov ebx, [num2]

xor eax, ebx

xor ecx, ecx

xor edx, edx

call print_integer

Shift_left:

```
mov ecx, msg-left  
mov edx, len-left  
mov ebx, 1  
mov eax, 4  
int 0x80
```

```
mov eax, [num1]  
mov ebx, [num2]
```

```
shl eax, 3
```

```
xor ecx, ecx
```

```
mov ecx, edx
```

```
call print_integer
```

```
jmp Exit
```

print_integer:

```
mov ebx, 10
```

```
div ebx
```

```
add edx, '0'
```

```
push edx
```

```
xor edx, edx
```

```
inc ecx
```

```
cmp eax, 0
```

```
jne print_integer
```

```
xor eax, eax
```

reverse:

```
pop dword [result+eax]
```

```
inc eax
```

```
dec ecx
```

```
cmp ecx, 0
```

```
jne reverse
```

```

mov edx, eax
mov ecx, result
mov ebx, 1
mov eax, 4
int 0x80

```

```

xor eax, eax
xor ebx, ebx
xor ecx, ecx
xor edx, edx

```

```
ret
```

Exit :

```

mov ecx, msg
mov edx, len
mov ebx, 1
mov eax, 4
int 0x80

```

```

mov eax, 1
int 0x80

```

Section data

```

num1 dd 200
num2 dd 100

```

```

msg db 0xA,
len equ $ - msg

```

```

msg-division db "The division is: "
len-division equ $ - msg-division

```

~~msg-division~~

```

msg-xor db "The XOR is: "
len-xor equ $ - msg-xor

```

```
msg_left db "The left shift is "  
len_left equ $ - msg_left
```

```
section .bss
```

```
result resb 8.
```