

```
%macro print 2
mov rax,01
mov rdi,01
mov rsi,%1
mov rdx,%2
syscall
%endmacro
```

```
%macro read 2
mov rax,00
mov rdi,00
mov rsi,%1
mov rdx,%2
syscall
%endmacro
```

```
section .data
n1 dq 04h
n2 dq 02h
new db 0xA
```

```
t1 db "MENU"
l1 equ $-t1
print new,1
t2 db "1.ADDITION"
l2 equ $-t2
print new,1
t3 db "2.SUBTRACTION"
l3 equ $-t3
print new,1
t4 db "3.MULTIPLICATION"
l4 equ $-t4
print new,1
t5 db "4.DIVISION"
l5 equ $-t5
print new,1
t7 db "5.EXIT"
l7 equ $-t7
print new,1
t6 db "Enter your choice: "
l6 equ $-t6
print new,1
```

```
section .bss
result resb 2
choice resb 2
```

```
section .text
global _start
```

\_start:

menu:

```
print new,1
print t1,11
print new,1
print t2,12
print new,1
print t3,13
print new,1
print t4,14
print new,1
print t5,15
print new,1
print t7,17
print new,1
print t6,16
print new,1
```

```
read choice,2
print new,1
```

```
cmp byte[choice],31h
je addition
```

```
cmp byte[choice],32h
je subtraction
```

```
cmp byte[choice],33h
je multiplication
```

```
cmp byte[choice],34h
je division
```

```
cmp byte[choice],35h
je exit
```

```
addition:
call Addition
jmp menu
```

```
subtraction:
call Subtraction
jmp menu
```

```
multiplication:
call Multiplication
jmp menu
```

```
division:
call Division
jmp menu
```

```

exit:
mov rax,60
mov rdi,00
syscall

HtoA:
mov rsi,result
mov cl,16
_ll:
rol al,04
mov bl,al
and bl,0Fh
cmp bl,09h
jle _ll1
add bl,07h
_ll1:
ADD bl,30H
mov byte[rsi],bl
inc rsi
dec cl
jnz _ll
print result,2
print new,1
ret

```

```

Addition:
mov rax,qword[n1]
mov rbx,qword[n2]
add rax,rbx
call HtoA
ret

```

```

Subtraction:
mov rax,qword[n1]
mov rbx,qword[n2]
sub rax,rbx
call HtoA
ret

```

```

Multiplication:
mov rax,qword[n1]
mov rbx,qword[n2]
mul rbx
push rax
mov rax,rdx
call HtoA
pop rax
call HtoA
ret

```

```

Division:
xor rdx,rdx

```

```
mov rax,qword[n1]
mov rbx,qword[n2]
div rbx
push rdx
call HtoA
pop rdx
mov rax,rdx
call HtoA
ret
```