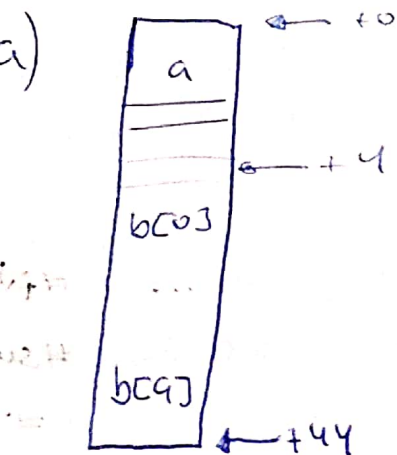


Problems 2.9



b) $@s[i3.bcj] = @s + i * 44 + 4 + j * 4$

c) `imul $44, %esi`

`imull $44, 4(%esi, %edi, 4), %eax`

`movb (%eax), %dl`

`cs rax`

Problems 2.10

a)

i	← -12
sums	← -8
file	← -4
%ebp	
@RET	← +8
@M	← +12
m	← +16
n	← +20

b) ~~push~~

calculator: pushl %ebp

movl %esp, %ebp

subl \$12, %esp

pushl %ebx

movl \$0, -4(%ebp) # file = 0

movl \$0, -8(%ebp) # sums = 0

movl 12(%ebp), %ebx # i = file

cmpl 16(%ebp), %ebx # i < n

fori:

jge endfor

bal -4(%ebp), %eax # &file

pushl %eax

movl -4(%ebp), %eax # i.eax = file

imull \$10, %eax # file * 10

addl %ebx, %eax # file * 10 + i

movl 8(%ebp), %edx # &@M

movl (%edx, %eax, 4), %eax #

pushl %eax

call Normaliz

addl \$8, %esp

addl %eax, -8(%ebp) # sums += Normal

incl %ebx # i++

jmp fori

endfor: -8(%ebp), %eax

incl %eax

popl %ebx

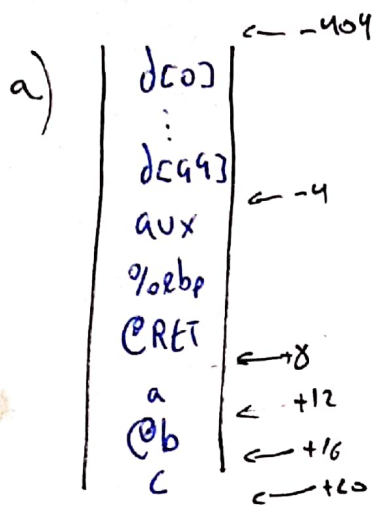
movl %ebp, %esp

popl %ebp

ret

$$MCfile[i] = \%eax = (file * 10 + i) * 4 + @M$$

Probleme 2.14



b)

```

examen(0, 0, &aux)
    leal -4(%ebp), %ecx
    pushl %ecx
    leal -404(%ebp), %ecx
    pushl %ecx
    pushl $0
    call examen
    
```

d)

```

pushl 16(%ebp)
pushl 12(%ebp)
pushl 8(%ebp)
call examen
    
```

c)

```

movl $0, %ecx
for: cmpl $100, %ecx
    jge f1for
    leal -404(%ebp), %ecx
    movl (%ecx, %ecx, 4), %ecx
    movl 12(%ebp), %edx
    movl %ecx, (%edx, %ecx, 4)
    incl %ecx
    jmp for
    
```

f1for: