

## Exercice 1

The screenshot shows an assembly editor with two windows. The 'Source Code' window on the left contains the following assembly code:

```

CLO
MOV AL, [64]
MOV BL, [65]
CMP AL, BL
JNS SI_ANOTINFB
SI_AINFB:
MOV BL, 64
JMP FINSI
SI_ANOTINFB:
MOV BL, 65
FINSI:
MOV AL, [BL]
INC AL
MOV [BL], AL
ORG 64
DB 1
DB 2
END

```

The 'RAM Source Code View' window on the right displays the code in memory, with addresses 00 to FF. The code is as follows:

Address	Code
00	CLO MOV AL [64] MOV BL [65] CMP AL BL JNS SI_ MOV BL 64 JMP
10	FIN MOV BL 65 MOV AL [BL] INC AL MOV [BL] AL END END END
20	END END END END END END END END END END END END END
30	END END END END END END END END END END END END END
40	END END END END END END END END END END END END END
50	END END END END END END END END END END END END END
60	END END END END 02 2 END END END END END END END
70	END END END END END END END END END END END END END
80	END END END END END END END END END END END END END
90	END END END END END END END END END END END END END
A0	END END END END END END END END END END END END END
B0	END END END END END END END END END END END END END
C0	END
D0	
E0	
F0	

The 'Log Assembler Activity' window at the bottom shows the same code, with the 'END' instruction at address 10 highlighted in red.

La valeur 1 qui est plus petite que 2 a bien été stocker et incrémenté de 1 dans la case 100.

## Exercise 2

☐ Write Run Log
 ☐ Log Assembler Activity

Source Code

List Fi

RAM Source Code View

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	CLO	MOV	BL	64	IN	00	CMP	AL	0D	JZ	FIN	MOV	[BL]	AL	INC	BL
10	JMP	BOUC	MOV	AL	0	MOV	[BL]	AL	END	END	END	END	END	END	END	END
20	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
30	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
40	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
50	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
60	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
70	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
80	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
90	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
A0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
B0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
C0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END

Log Assembler Activity

RAM Source Code View

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	CLO	MOV	BL	64	IN	00	CMP	AL	0D	JZ	FIN	MOV	[BL]	AL	INC	BL
10	JMP	BOUC	MOV	AL	0	MOV	[BL]	AL	END	END	END	END	END	END	END	END
20	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
30	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
40	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
50	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
60	END	END	END	END	61	62	66	68	00	END	END	END	END	END	END	END
70	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
80	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
90	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
A0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
B0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
C0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END

On voit que les valeurs rentrées au clavier sont convertis en ASCII et conserver. De plus le code ASCII de la touche entrée n'a pas été conservé.

## Exercice 3

☐ Write Run Log
 ☐ Log Assembler Activity

Source Code

List File

RAM Source Code View

```

CLO
MOV BL, 64
BOUCLE:
IN 00
CMP AL, 0D
JZ FINBOUCLE
MOV [BL], AL
INC BL
JMP BOUCLE
FINBOUCLE:
MOV AL, 0
MOV [BL], AL
MOV CL, C0
MOV BL, 64
ENDROIT:
MOV AL, [BL]
CMP AL, 0
JZ MOITIE
MOV [CL], AL
INC BL
INC CL
JMP ENDROIT
MOITIE:
DEC BL
CMP BL, 64
JS FIN
MOV AL, [BL]
MOV [CL], AL
INC CL
JMP MOITIE
FIN:
END

```

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	CLO	MOV	BL	64	IN	00	CMP	AL	0D	JZ	FIN	MOV	[BL]	AL	INC	BL
10	JMP	BOUC	MOV	AL	0	MOV	[BL]	AL	MOV	CL	C0	MOV	BL	64	MOV	AL
20	[BL]	CMP	AL	0	JZ	MOI	MOV	[CL]	AL	INC	BL	INC	CL	JMP	END	DEC
30	BL	CMP	BL	64	JS	FIN	MOV	AL	[BL]	MOV	[CL]	AL	INC	CL	JMP	MOI
40	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
50	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
60	END	END	END	END	4D	41	00	END	END	END	END	END	END	END	END	END
70	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
80	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
90	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
A0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
B0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
C0	4D	41	41	4D												
D0																
E0																
F0																

☒ Hexadecimal
 ☐ ASCII
 ☒ Source

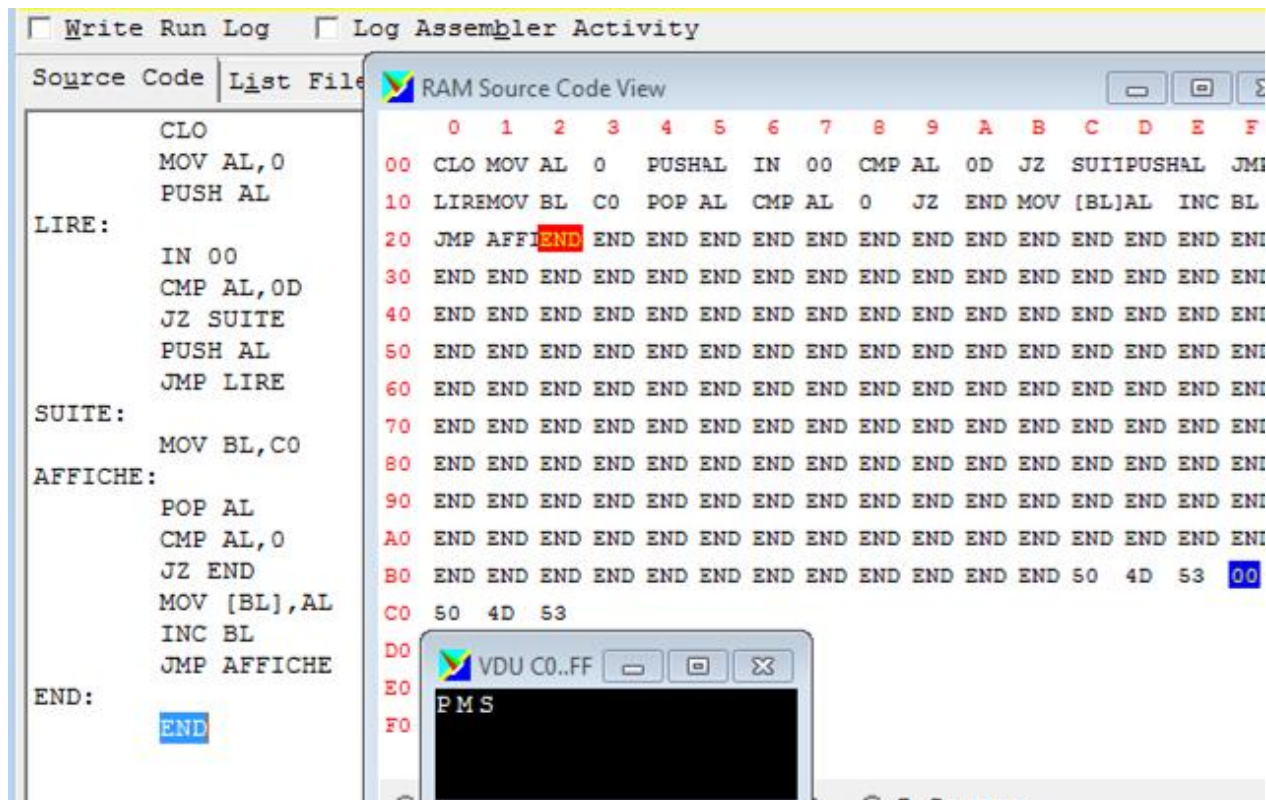
VDU CO..FF

MAAM

L'affichage des caractères saisis au clavier se font bien dans l'ordre croissant et décroissant.



## Exercice 4



Les lettres saisies sorte une à une dans l'ordre inverse de la saisie.

## Exercice 5

```
CLO
MOV BL, C0
ENTREE:
IN 00
CMP AL, 0D
JZ FINLIRE
MOV [BL], AL
INC BL
JMP LIRE
FINENTREE:
DEC BL
MOV AL, C0
PAL:
CMP AL, BL
JNS OUI
```

```
MOV CL, [AL]
MOV DL, [BL]
CMP CL, DL
JNZ NON
INC AL
DEC BL
JMP PALIN
```

OUI:

```
MOV AL, [A0]
MOV [D0], AL
MOV AL, [A1]
MOV [D1], AL
MOV AL, [A2]
MOV [D2], AL
JMP FINPALIN
```

NON:

```
MOV AL, [A4]
MOV [D0], AL
MOV AL, [A5]
MOV [D1], AL
MOV AL, [A6]
MOV [D2], AL
```

FINPAL:

```
ORG A0
DB "OUI"
DB 0
DB "NON"
DB 0
END
```

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
elle																	
OUI																	
	00	CLO	MOV	BL	C0	IN	00	CMP	AL	0D	JZ	FINI	MOV	[BL]	AL	INC	BL
	10	JMP	LIRE	DEC	BL	MOV	AL	C0	CMP	AL	BL	JNS	OUI	MOV	CL	[AL]	MOV
	20	DL	[BL]	CMP	CL	DL	JNZ	NON	INC	AL	DEC	BL	JMP	PAL	MOV	AL	[A0]
	30	MOV	[D0]	AL	MOV	AL	[A1]	MOV	[D1]	AL	MOV	AL	[A2]	MOV	[D2]	AL	JMP
laval	40	FINI	MOV	AL	[A4]	MOV	[D0]	AL	MOV	AL	[A5]	MOV	[D1]	AL	MOV	AL	[A6]
OUI	50	MOV	[D2]	AL	END	END	END	END	END	END	END	END	END	END	END	END	END
	60	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
	70	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
	80	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
	90	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
	A0	O	U	I	0	N	O	N	0	END	END	END	END	END	END	END	END
	B0	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END
	C0	65	6C	6C	65												
	D0	4F	55	49													
	E0																