

TD ndeg 8 - Programmation en code machine

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February 4, 2015

1 Programmation

1.1

INA = FFA0₁₆

OUTA = FFA2₁₆

LOADA=FFDC₁₆

```
LDW R1, #0xFFA0
LDW R0, (R1)
LDW R1, #3
SUB R0, R1, R0
JGE #4
NEG R0, R0
SRA R0, R0
LDW R1, #0xFFA2
STW R0, (R1)
JMP #-28
```

@	Hexa	Code	Label	ASM	Commentaire
FFDC	6180	0110 0001 1000 0000		LDW R1, #FFA0	R1 ← FFA0
FFDE	FFA0				
FFE0	60A1	0110 0000 0101 0001		LDW R0,(R1)	
FFE2	6180	0110 0001 1000 0000		LDW R1,#3	
FFE4	0003				
FFE6	F010	1111 0000 0001 0000		SUB R0,R1,R0	
FFE8	0880	0000 1000 1000 0000		JAE #4	
FFEA	0004				
FFEC	4700	0100 0111 0000 0000		NEG R0,R0	
FFEE	4720			SRL R0,R0	

@	Hexa	Code	Label	ASM	Commentaire
FFF0	6180			LDW R1,#0xFFA2	
FFF2	FFA2				
FFF4	6021			STW R0,(R1)	
FFF6	0180			JMP #-28	
FFF8	FFE4				

1.2

Changement de ces lignes :

```
JAE #4
NEG R0,R0
SRL R0,R0
```

1.3

Voir tableau