

# Corrigé de l'examen

## Exercice 1

1.
  - a. Liste des instructions correctes {1, 2, 6, 9,12}
  - b. Liste des instructions incorrectes {3, 4, 5, 7, 8,10,11}
2. Séquence assembleur pour  $DF \leftarrow 1$

```
PUSHF           ;empiler contenu PSW
POP  AX         ;AX ← Contenu Sommet Pile= Contenu PSW
OR   AX,        000001000000000000B ; Forcer B10 à 1
PUSH AX         ;PSW ← Contenu Sommet Pile = AX
POPF
```

3. Tailles      BA = 32bits      BD = 32bits

## Exercice 2

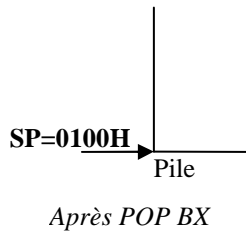
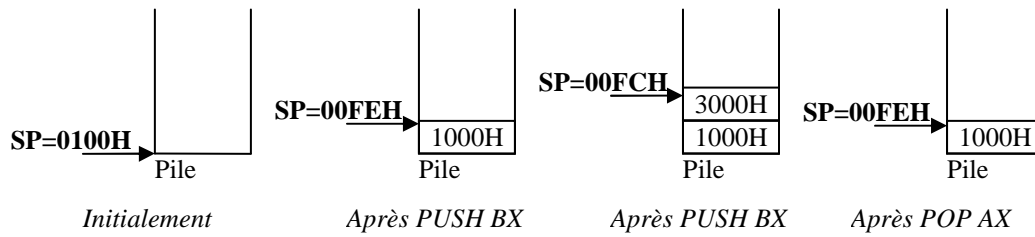
1) Temps d'exécution :

<u>Instructions</u>	<u>Temps d'exécution (en CH)</u>
MOV AX, @Donnee	4
MOV DS, AX	2
MOV AX, @Code	4
MOV CS, AX	2
MOV SP, 100H	4
MOV X, 1000H	10 + EA = 16
MOV BX, X	8 + EA = 14
MOV SI, 200FH	4
PUSH BX	11
MOV Y, 2000H	10 + EA = 16
ADD BX, Y	9 + EA = 15
PUSH BX	11
POP AX	8
POP BX	8
MOV X, AX	10 (Mem, Acc)
MOV Y, BX	9 + EA = 15
MOV [SI+12H], DI	9 + EA + 4*1 = 22
<b>TOTAL</b>	<b>= 166</b>

2) Code Machine

<u>Instructions</u>	<u>Code Machine</u>
MOV SP, 100H	<b>C7C40001H</b> ou <b>BC0001H</b>
MOV X, 1000H	<b>C70600000010H</b>
MOV [SI+12H], DI	<b>897C12H</b>

3)



4) AX = 3000H, BX = 1000H, X = 3000H, Y = 1000H

5) 0FH = 15 octets

6)

*a) Cas Chevauchement Partiel @Donnee = 2144H et @Code = 2145H*

Instructions	Code Machine
MOV AX, @Donnee	<b>B84421H</b>
MOV AX, @Code	<b>B84521H</b>

*b) Cas Chevauchement Total @Donnee = @Code = 2144H*

Instructions	Code Machine
MOV AX, @Donnee	<b>B84421H</b>
MOV AX, @Code	<b>B84421H</b>