Exercice 1

Réponse

```
        ORG 00
        CALL 20
        CALL 50

        ORG 20
        MOV CL, 0
BOUCLE:
        IN 0
        CMP AL, 0D
        JZ FIN
        AND AL, CF
        MUL CL, A
        ADD CL, AL
        JMP BOUCLE
FIN:
        PUSH CL
        POP AL
        RET

        ORG 50
SUITE:
        MOV BL, 0
        PUSH BL
AFFICHE:
        PUSH AL
        POP BL
        MOD AL, A
        OR AL, 30
        PUSH AL
        PUSH BL
        POP AL
        DIV AL, A
        CMP AL, 0
        JNZ AFFICHE
        MOV BL, C0
LIRE:
        POP AL
        CMP AL, 0
        JZ FIN2
        MOV [BL], AL
        INC BL
        JMP LIRE
FIN2:
        RET
        END
```

Exercice 2

Réponse

```
        ORG 20
        POP DL
        MOV CL, 0
BOUCLE:
        IN 0
        CMP AL, 0D
        JZ FIN
        AND AL, CF
        MUL CL, A
        ADD CL, AL
        JMP BOUCLE
FIN:
        PUSH CL
        PUSH DL
        RET

        ORG 50
        POP DL
        POP AL
SUITE:
        MOV BL, 0
        PUSH BL
AFFICHE:
        PUSH AL
        POP BL
        MOD AL, A
        OR AL, 30
        PUSH AL
        PUSH BL
        POP AL
        DIV AL, A
        CMP AL, 0
        JNZ AFFICHE
        MOV BL, C0
LIRE:
        POP AL
        CMP AL, 0
        JZ FIN2
        MOV [BL], AL
        INC BL
        JMP LIRE

FIN2:
        RET

        ORG 00
        CALL 20
        CALL 50
        END
```

Exercice 3

Réponse

```
        CLO
```

```
        ORG 20
        POP DL
        MOV CL, 0
        PUSH BL
BOUCLE:
        IN 0
        CMP AL, 0D
        JZ FIN
        AND AL, CF
        MUL CL, A
        ADD CL, AL
        JMP BOUCLE
FIN:
        PUSH CL
        PUSH DL
        RET
        ORG 50
SUITE:
        POP DL
        POP AL
AFFICHE:
        PUSH AL
        POP BL
        MOD AL, A
        OR AL, 30
        PUSH AL
        PUSH BL
        POP AL
        DIV AL, A
        CMP AL, 0
        JNZ AFFICHE
        MOV BL, C0
LIRE:
        POP AL
        CMP AL, 0
        JZ FIN2
        MOV [BL], AL
        INC BL
        JMP LIRE
FIN2:
        PUSH DL
        RET
        ORG 01
        CALL 20
        CALL 50
        END
```

Exercice 3

```
        CLO
        ORG 20
        MOV CL,0
BOUCLE:
        IN 0
        CMP AL,0D
        JZ FIN
        AND AL,CF
        MUL CL,A
        ADD CL,AL
        JMP BOUCLE
FIN:
        PUSH CL
```

```
        POP AL
        RET
;-------------------CALCUL PGCD----------------------
        ORG 40
WHILE:
        CMP AL,BL ;Condition de sortie
        JZ ENDWHILE ; Si AL != BL
        JS INF ; Jump sans inf si A est < à B
        Sup: SUB AL, BL ; A := A - B
        JMP WHILE
        Inf:
        SUB BL, AL ; B := B - A
        JMP WHILE
ENDWHILE:
        PUSH AL
        POP CL
        RET
;-------------------FIN PGCD ----------------------
        ORG 60
SUITE:
        MOV BL,0
        PUSH BL
AFFICHE:
        PUSH AL ; BL := AL
        POP BL
        MOD AL,A ; obtenir unité
        OR AL,30 ; Transforme unité en ASCII PUSH AL ; Garde ASCII PUSH BL POP AL ; met AL = à BL
        DIV AL,A
        CMP AL,0
        JNZ AFFICHE
        MOV BL,C0
LIRE:
        POP AL
        CMP AL,0
        JZ FIN2
        MOV [BL],AL
        INC BL
        JMP LIRE
FIN2:
        RET
        ORG 01
        CALL 20
        PUSH AL
        CALL 20
        PUSH AL
        POP BL
        POP AL
        CALL 40
        CALL 60
        END
```