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#### **20I-1884**

## CS-B

### <u>Q1</u>

.model small

.stack 100h

.data

.code

mov al,48

mov bl,57

;loop:

mov cx, 10

11:

mov dl,al

mov ah,02

int 21h

inc al

loop L1

mov dx,13

mov ah, 02

int 21h

mov dx,10

mov ah, 02

int 21h

mov cx, 10

12:

mov dl,bl

mov ah,02

int 21h

dec bl

end

```
C:\>task1.exe
0123456789
9876543210_
```

### <u>Q2</u>

```
.model small
```

.stack 100h

.data

str1 db 'Ahmed\$'

.code

mov ax, @data

mov ds, ax

mov si, offset str1

mov cx, 6

11:

mov dx,[si]

mov ah, 02h

int 21h

inc si

loop l1

mov ah, 4ch

int 21h

end

C:\>task2.exe Ahmed

## <u>Q3</u>

.model small

.stack 100h

.data

str1 db 'A','h','m','e','d','\$'

.code

mov ax, @data mov ds, ax mov si, offset str1 mov cx, 5 11: mov dx,[si+4] mov ah, 02h int 21h dec si loop I1 mov ah, 4ch int 21h end C:\>task3.exe demhA <u>Q4</u> .MODEL SMALL .STACK 100H .DATA digitCount db 0 anotherCounter db 0 enteredNumber dw 0 temp1 dw 0 .CODE main proc MOV AX, @DATA MOV DS, AX MOV DX, 0 input: MOV AH, 01 INT 21H

```
CMP AL, 13
JE StopIt
SUB AL, 48
MOV AH, 0
MOV temp1, AX
MOV AX, 0
MOV AX, enteredNumber
MOV BL, 10
MUL BL
ADD AX, temp1
MOV enteredNumber, AX
INC digitCount
JMP input
StopIt:
mov cx, 79
CMP enteredNumber, CX
ja g1
mov cx, 75
cmp enteredNumber, cx
ja g2
mov cx, 70
cmp enteredNumber, cx
ja g3
mov cx, 65
cmp enteredNumber, cx
ja g4
mov cx, 59
cmp enteredNumber, cx
ja g5
jmp g6
g1: mov dx, 'A'
```

```
mov ah, 02h
       int 21h
       jmp exit
g2: mov dx, 'B'
       mov ah, 02h
       int 21h
       jmp exit
g3: mov dx, 'C'
       mov ah, 02h
       int 21h
       jmp exit
g4: mov dx, 'D'
       mov ah, 02h
       int 21h
       jmp exit
g5: mov dx, 'E'
       mov ah, 02h
       int 21h
       jmp exit
g6: mov dx, 'F'
       mov ah, 02h
       int 21h
exit:
MOV AH, 4CH
INT 21H
main endp
end main
C:N>task4.exe
80
```