**LAB TASK**

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**Section: B**

**Question# 01**

INCLUDE Irvine32.inc

.data

a byte 16

b byte 32

c1 byte 64

d byte 64

e1 byte ?

eq1 byte ?

gr byte ?

ls byte ?

count byte ?

.code

Main PROC

XOR EAX,EAX

mov al, a

add al, b

mov e1,al

call writedec

call crlf

mov al,eq1

cmp al,d

JNE L1

cmp al,0

JB L1

mov e1,1

JMP L2

L1:

mov eq1,0

L2:

xor eax,eax

mov al,eq1

call writedec

call crlf

xor eax,eax

mov al,e1

cmp al,d

JBE L3

cmp al,0

JNZ L3

mov eq1,0

JMP L4

L3:

mov eq1,3

L4:

xor eax,eax

mov al,eq1

call writedec

call crlf

xor eax,eax

mov al,e1

cmp al,d

JA L5

cmp al,10

JA L5

mov gr,0

JMP L6

L5:

mov gr,1

L6:

xor eax,eax

mov al,gr

call writedec

call crlf

xor eax,eax

mov al,e1

cmp al,d

JAE L11

mov ls,1

L11:

mov ls,0

xor eax,eax

mov al,e1

JMP J8

L7:

inc count

J8:

cmp al,d

JNE L7

exit

main endp

END MAIN

**Question # 05**

Include Irvine32.inc

.data

a1 byte 10

a2 byte 20

a3 byte 30

a4 byte 40

a5 byte 50

str1 BYTE "MAXIMUM VALUE IS = " , 0dh, 0ah

.code

Maximum proc

mov al,a1

cmp al,a2

JA L1

mov al,a2

L1:

cmp al,a3

JA L2

mov al,a3

L2:

cmp al,a4

JA L3

mov al,a4

L3:

cmp al,a5

JA next

mov al,a5

Next:

mov al, a5

mov edx, offset str1

call writestring

call writedec

call crlf

ret

Maximun endp

main proc

xor eax,eax

call Maximum

exit

main endp

end main

**Question # 03**

.data

msg byte "Enter your marks",0h

str0 byte "A+",0h

str1 byte "A",0h

str2 byte "A-",0h

str3 byte "B+",0h

str4 byte "B",0h

str5 byte "B-",0h

str6 byte "C+",0h

str7 byte "C",0h

str8 byte "C-",0h

str9 byte "D+",0h

str10 byte "D",0h

.code

Cgpa proc

cmp eax, 90

JB L1

mov edx, offset str0

call writestring

jmp Next

L1:

cmp eax,86

jb L2

mov edx,offset str1

call writestring

jmp Next

L2:

cmp eax,82

jb L3

mov edx,offset str2

call writestring

jmp Next

L3:

cmp eax,78

jb L4

mov edx,offset str3

call writestring

jmp Next

L4:

cmp eax,74

jb L5

mov edx,offset str4

call writestring

jmp Next

L5:

cmp eax,70

jb L7

mov edx,offset str5

call writestring

jmp Next

L7:

cmp eax,66

jb L8

mov edx,offset str6

call writestring

jmp Next

L8:

cmp eax,62

jb L9

mov edx,offset str7

call writestring

jmp Next

L9:

cmp eax,58

jb L10

mov edx,offset str8

call writestring

jmp Next

L10:

cmp eax,54

jb L11

mov edx,offset str9

call writestring

jmp Next

L11:

cmp eax,50

jb Next

mov edx,offset str10

call writestring

jmp Next

Next:

;mov edx,"none"

ret

Cgpa endp

Question # 02

Include Irvine32.inc

.data

x1 dword 10

x2 dword 1000

xi dword 0

y1 dword 10

y2 dword 10

yi dword 0

i dword 2

.code

distance proc

mov eax,x2

sub eax, x1

mov xi, eax

mov eax, y2

sub eax, y1

mov yi, eax

mov edx, xi

sub eax, yi

mul eax

call writeint

mov ecx,1

l1:

mov eax,10

call writeint

mov eax,ecx

mul ecx

cmp eax,edx

je next

cmp edx,ecx

jb l1

next:

ret

distance endp

;cgpa proto

main proc

xor eax,eax

call distance

exit

main endp

end main