1)Is the following code correct?

a dd 10;

b dd 20

mov ax, a



cmp ax,5

2) Is the following code correct?

a dd 10;

b dd 20

mov ax, [a]



cmp 5, ax



3) What are the results after running the following code: (the values in ax,bx)

mov bx,0

mov al, 00011110b

shr al, 2 ;

adc bx,1

Answer:

1. al = 00000111b, bx = 2,
2. al = 00000111b, bx = 1,



1. execution err
2. compilation

4) How many times is executed the code inside the loop?:

mov ax,5

mov ecx,1

sub ax, 2

sub ecx,2

repeta:

inc ax

loop repeta

a) once

b) sintax err

c) execution err

d) 256 ori

e) 65535 ori

f) infinit



g) FFFFFFFFori

5) How many times is executed the code inside the loop?::

mov ax,5

mov ecx,3

sub ax, 2

sub ecx,2

repeta:

inc ax

loop repeta

a) once



b) sintax err

c) execution err

d) 256 ori

e) 65535 ori

f) infinit

g) FFFFFFFFori

6) a db 22h

b db 22h;

c dw 2h ;

d dw 10h ;

mov ax, [a];

mov bx, 4;

add bx, ax;

mov ax, [b+1]

add ax, [c+1]

mov [c], ax

What values will be in bx and in c?



7) Considering the variables, which of the lenght definition is correct (returns the correct length value of the string A and B)

a db 1,2,3,4,5;

b db 1,2,3,4,5;

c dw 1,2,3,4,5 ;

1. lenA1 equ $-a;



1. lenA2 equ $-b;



1. lenA3 equ $-c;
2. lenB1 equ $-b;
3. lenB2 equ $-c/2;
4. lenB3 equ $-b - c

8) What will be the result of the following instructions:

mov al, 128

cbw

mov bl,2

div bl

1. al = 40
2. al = 40d
3. al = 40,5
4. execution error
5. sintax error, cbw should not be used there
6. al = 40h



1. al = 0100\_0000

9.

a dw 5

b dw 6;

c dd 112233h



mov ax, [a]

mov bx, [b]

mov ecx, [c]

push ecx

push ax

pop eax ;

push bx

pop ebx ;

What will be in eax, ebx after running the code?



10. Which one of the follwing address(es) is/are valid?

a) mov eax, [eax\*9 + 12] **-> [eax+eax\*8+12]**

b) mov eax, [ss:ebx + eax + 3] **-ss only for esp or ebp when they are used as a base!!**

c) mov eax, [esi + 2\*esp + 1] **-esp can’t be an index!!**

d) mov eax, [esp + 2\*esi + 1] **ok**

e) mov eax, [ebx + 3 \* eax + 1]**-wrong scale**

f) mov eax, [edx + 4 \* eax + 2] **ok**

g) mov eax, [edx + 9 \* eax]-wrong

f) mov eax, [edx + eax \* 9] -wrong

11) What value will be in AX after running the following code?

|  |  |
| --- | --- |
| mov ax,61440  mov bl,5  div bl | mov ax,61440  mov bl,5  idiv bl |

12) What value will be in AX after running the following code?

|  |  |
| --- | --- |
| mov ax, 86h  cbw  mov bl,2  div bl | mov ax, 86h  cbw  mov bl,2  idiv bl |

13) What is the result of:

a) Mov al, 11223344h



b) mov al, Aah



c) flags

d) mov al, -3

mov bl, 5



mul bl

e) mov ax, 15

div 3

f) mov ax,15

mov bl, 3

idiv bl

e)cmp ax,bx

f) mov ax,5

cmp 4,ax

g) what does CLD/STD instruction?

k) what does the following instruction?

rep;

repnz;

repz;

14) How many bytes are reserved?

R resb 4;

a resw 2;



c resd 3;

d resq 4

e rest 1;