Christian Clark

Chapter 5 Review and Programming excersizes

CIS 123

1. PUSHAD
2. PUSHFD
3. POPFD
4. You can choose the order and the specific registers you push in NASM compared to only all registers in a specific order
5. You would need to decrement the stack pointer then push a value into the ESP but I’m having a hard time figuring out how to do that
6. False
7. False
8. True
9. False
10. False
11. True
12. False
13. False
14. You would need to change the type definitions in the array declaration and in the arraysum function and the result would be in the lower 16bits of the eax register, or the ax register. The modified code will be attached in the email.
15. 5
16. D) ERROR on line 11
17. C) EAX is 30 on line 6
18. C) EAX is 30 on line 6
19. A) EDX will be 40 on line 6
20. 0a000000h, 14000000h, 1e000000h, 28000000h

ALGORITHM WORKBENCH CH5

1. mov EAX,10

mov EBX,20

push EAX

push EBX

pop EAX

pop EBX

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer screen

Description automatically generated

3) subtest proc

.data

var1 DWORD 1000h

var2 DWORD 2000h

.code

ret

subtest endp

4) will be attached as ArraySwapDownValues.asm

5) subtest proc

pop eax

push eax

ret

subtest endp

this will pop and immediately push the first thing that is on the stack, which will be the memory address of the next instruction

A screenshot of a computer screen

Description automatically generated