

Summary Exercise - Week 3

Due Oct 20 at 11:59pm

Points 30

Questions 30

Available after Oct 13 at 12am

Time Limit 360 Minutes

Allowed Attempts 2

[Take the Quiz Again](#)

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	69 minutes	29.75 out of 30

Score for this attempt: **29.75** out of 30

Submitted Oct 16 at 10:15pm

This attempt took 69 minutes.

Question 1

1 / 1 pts

If the LOOP instruction sets ECX to zero, a jump to the destination label **does** take place.

☐ True

☒ False

Correct!

Question 2

1 / 1 pts

The INC instruction does not affect the Carry flag.

☒ True

☐ False

Correct!

Question 3

1 / 1 pts

The MOVSX instruction sign-extends an integer into a larger operand.

Correct!

☒ True

☐ False

Question 4

1 / 1 pts

Adding 0FFh and 05h in an 8-bit register sets the Overflow flag.

☐ True

Correct!

☒ False

Question 5

1 / 1 pts

Adding 5 to 0FBh in an 8-bit register sets the Zero flag.

Correct!

☒ True

☐ False

Question 6

1 / 1 pts

A common programming error is to inadvertently initialize ECX to zero before beginning a loop (when using the LOOP instruction).

Correct!

☒ True

☐ False

Question 7

1 / 1 pts

The MOVSX instruction is only used with unsigned integers.

☐ True

Correct!

☒ False

Question 8

1 / 1 pts

The MOVZX instruction is only used with unsigned integers.

Correct!

☒ True

☐ False

Question 9

1 / 1 pts

MASM has built-in range checking for effective addresses.

☐ True

Correct!

☐ False

Question 10

1 / 1 pts

The following instructions will set the Carry flag:

```
mov al,0FEh  
sub al,2
```

☐ True

Correct!

☒ False

Question 11

1 / 1 pts

The formal name of the LOOP instruction is

☐ Like Object Oriented Programming

☐ Loop According to EBX Counter

Correct!

☒ Loop According to ECX Counter

☐ Loop According to CSI Counter

Question 12

1 / 1 pts

The _____ procedure advances the cursor to the beginning of the next line in the console window.

Correct!

CrLf

Correct Answers

CrLf

Question 13

1 / 1 pts

Which library procedure sets the Zero flag if the AL register contains the ASCII code for a decimal digit (0–9)?

Correct!

IsDigit

Correct Answers

IsDigit

Question 14

1 / 1 pts

A stack is also called a FIFO structure (First-In, First-Out) because the last value put into the stack is always the first value taken out.

☐ True

Correct!

☒ False

Question 15

1 / 1 pts

Which of the following is true about the PUSH instruction?



It increments the stack pointer by 1 and copies the operand into the stack at the location pointed to by the stack pointer.

Correct!



It decrements the stack pointer (by 2 or 4) and copies the operand into the stack at the location pointed to by the stack pointer.



It copies the operand into the stack at the location pointed to by the stack pointer, and then decrements the stack pointer (by 2 or 4).



It increments the stack pointer (by 2 or 4) and copies the operand into the stack at the location pointed to by the stack pointer.

Question 16

1 / 1 pts

Which library procedure writes an unsigned 32-bit integer to standard output in hexadecimal format?

Correct!

WriteHex

Correct Answers

WriteHexB

WriteHex

Table 5-1

Question 17

1 / 1 pts

Which register contains an integer before calling WriteDec?

☐ EBX

☐ ECX

☐ EDX

Correct!

☒ EAX

☐ EXA

☐ EWD

Section 5.3

Question 18

1 / 1 pts

Which register contains the starting address of data when calling DumpMem?

Correct!

☒ ESI

☐ EAX

☐ EXI

☐ EXD

☐ EBX

☐ ECX

Question 19

1 / 1 pts

What will be the value of EAX when the following sequence of instructions has executed?

```
push 5  
push 10  
pop ebx  
pop eax
```

Correct!

5

Correct Answers

5 (with margin: 0)

Question 20

1 / 1 pts

Which of the following CALL instructions writes the contents of EAX to standard output as a signed decimal integer?

☐ call WriteHex

Correct!

☒ call WriteInt

☐ call WriteDec

☐ call WriteInteger

Question 21

1 / 1 pts

Mechanically speaking, the CALL instruction pushes its return address on the stack and copies the called procedure's address into the instruction pointer.

Correct!

☒ True

☐ False

Question 22

1 / 1 pts

Which of the following code sequences assigns the value 0x10 to EBX?
(select all that are correct)

☐ `push 20h
mov ecx,10h
push ecx
pop eax
pop ebx`

Correct!

☒ `mov edx,20h
push edx
mov ecx,10h
push ecx
pop ebx
pop edx`

☐ `mov ecx,10h
mov edx,20h
push ecx
push edx
pop ebx
pop edx`

Correct!

☒ `mov edx,20h
push edx
mov ecx,10h
push ecx
pop ebx
pop edx`

Question 23

1 / 1 pts

A/An _____ procedure call occurs when a called procedure calls another procedure before the first procedure returns.

Correct!

- ☒ nested
- ☐ inner
- ☐ little
- ☐ contained

Question 24

1 / 1 pts

Which library procedure generates a 32-bit pseudorandom integer in a caller-specified range?

Correct!

RandomRange

Correct Answers

RandomRange

Table 5-1

Question 25

1 / 1 pts

The USES operator, coupled with the PROC directive, lets you list the names of all registers modified within a procedure.

Correct!

- ☒ True
- ☐ False

Question 26

1 / 1 pts

Which library procedure reads a 32-bit signed decimal integer from standard input?

Correct!

ReadInt

Correct Answers

ReadInt

Table 5-1

Question 27

1 / 1 pts

What will be the value of EAX when the following sequence of instructions has executed?

```
push 5
push 10
push 20
pop eax
```

Correct!

20

Correct Answers

20 (with margin: 0)

Question 28

1 / 1 pts

The instructions used to manipulate the ESP register are (select all that apply):

Correct!

☒ RET

Correct!

☒ PUSH

☐ INC

Correct!

☒ CALL

☐ JMP

☐ DEC

☐ JNE

Correct!

☒ POP

Question 29

0.75 / 1 pts

There are several important uses of runtime stacks in programs (select all that apply):

Correct Answer

☐

A stack makes a convenient temporary save area for registers when they are used for more than one purpose. After they are modified, they can be restored to their original values.

Correct!

☒

The stack provides temporary storage for local variables inside subroutines.

Correct!

☒

When calling a subroutine, you pass input values called arguments by pushing them on the stack.

Correct!

☒

When the CALL instruction executes, the CPU saves the current subroutine's return address on the stack.

Question 30

1 / 1 pts

By default, labels are visible only within the procedure in which they are declared.

Correct!

☒ True

☐ False

Quiz Score: **29.75** out of 30