Summary Exercise - Week 8

Due Nov 24 at 11:59pm **Points** 21 **Questions** 13
Available Nov 17 at 12am - Nov 24 at 11:59pm 8 days **Time Limit** 360 Minutes
Allowed Attempts 2

Attempt History

	Attempt	Time	Score
KEPT	Attempt 1	43 minutes	21 out of 21
LATEST	Attempt 2	13 minutes	19 out of 21
	Attempt 1	43 minutes	21 out of 21

Score for this attempt: **19** out of 21
Submitted Nov 20 at 7:04pm
This attempt took 13 minutes.

Question 1

1 / 1 pts

The _____ operator returns a count of the number of elements in a single data declaration.

Correct!

- (•) LENGTHOF
- ( ) PTR
- ( ) SIZEOF
- ( ) TYPE
- ( ) OFFSET

Question 2

1 / 1 pts

The _____ operator returns the size, in bytes, of a single element of a data declaration.

- LENGTHOF
- PTR
- SIZEOF
- OFFSET
- Correct! TYPE

Question 3

1 / 1 pts

The _____ operator returns a value that is equivalent to multiplying the number of elements in a single data declaration by the size, in bytes, of a single element of a data declaration.

- Correct! SIZEOF
- TYPE
- PTR
- OFFSET
- LENGTHOF

Question 4

1 / 1 pts

Loading a string byte using string primitives increments or decrements which register?

- EDX
- EDI
- ESP

Correct!

- ESI

Question 5

1 / 1 pts

Which of the following is the correct addressing formula for matrix index $M_{r,c}$?

- $BaseAddress + elementsPerRow \cdot [(r \cdot elementsSize) + c]$
- $BaseAddress + elementsPerColumn \cdot [(c \cdot elementSize) + r]$
- $BaseAddress + elementSize \cdot [(c \cdot elementsPerColumn) + r]$

Correct!

- $BaseAddress + elementSize \cdot [(r \cdot elementsPerRow) + c]$

Question 6

2 / 2 pts

Suppose that you are given the following partial data segment:

```
.data
myPtrCheck    BYTE    12h, 34h, 56h, 78h,
                      90h, ABh, CDh, EFh
.code
```

```
...
mov   eax, DWORD PTR [myPtrCheck+2]
```

EAX contains what value, in hexadecimal?

Correct!

AB907856h

orrect Answers

0hAB907856

AB907856

xAB907856

AB907856h

0xAB907856

Question 7

2 / 2 pts

Suppose that you are given the following partial data segment:

```
.data
myPtrCheck   BYTE   12h, 34h, 56h, 78h,
                    90h, ABh, CDh, EFh
.code
...
mov   eax, DWORD PTR myPtrCheck
```

EAX contains what value, in hexadecimal?

Correct!

78563412h

orrect Answers

0h78563412

78563412h

78563412

0x78563412

x78563412

Question 8

2 / 2 pts

Suppose that you are given the following partial data segment, which starts at address offset 0x1000 :

```
.data
idArray WORD 3546, 1534, 12, 3481, 154, 6423
x DWORD LENGTHOF idArray
y DWORD SIZEOF idArray
z DWORD TYPE idArray
```

z contains what value, in decimal? (Ignore the .0000 from Canvas)

Correct!

2

orrect Answers

2 (with margin: 0)

Question 9

0 / 2 pts

Assume that your program has access to the following data segment (starting at address 0x310):

```
.data
id        DWORD   7
matrix    WORD    50 DUP(10 DUP(?))
```

What is the hexadecimal address of matrix[7][3] (the 4th element of the 8th row)?

ou Answered

0x434

orrect Answers

0h03A6

0x03A6

0h3A6

3A6h

0x3A6

x3A6

3A6

03A6h

03A6

x03A6

Question 10

2 / 2 pts

Given the following array declaration, how many bytes of memory does array *matrix* require? (in decimal - ignore the .0000 from Canvas)

```
.data
matrix    WORD    27 DUP(15 DUP(?))
```

Correct!

810

orrect Answer

810

Question 11

2 / 2 pts

Which of the following postfix expressions corresponds to the given infix expression?

```
(5 + 3) * 12 / (3 * 4) + 12
```

- 5 3 12 + * 3 4 * / 12 +

Correct!

- 5 3 + 12 * 3 4 * / 12 +
- 5 3 + 12 * 3 4 / * 12 +
- 5 3 + * 12 3 4 * / 12 +

Question 12

2 / 2 pts

Which of the following infix expressions corresponds to the given postfix expression?

```
3 3 * 5 4 2 * / -
```

- 3 * 3 - 5 * 4 / 2
- 3 * 3 - 5 / 4 * 2

Correct!

- 3 * 3 - 5 / (4 * 2)
- 3 * (3 - 5) / (4 * 2)

Question 13

2 / 2 pts

Which of the following FPU manipulations corresponds to the given infix notation?

```
Z = (A + B - C) / D * E
```

```
finit
fld    A
fld    B
fsub
fld    C
fadd
fld    D
fdiv
fld    E
fmul
fstp   Z
```

```
finit
fld    A
fld    B
fadd
fld    C
fsub
fld    D
fdiv
fld    E
fmul
fstp
```

Correct!

```
finit
fld    A
fld    B
fadd
fld    C
fsub
fld    D
fdiv
fld    E
fmul
fstp   Z
```

```
finit
fld    A
fld    B
fadd
fld    C
fsub
fld    D
fmul
fld    E
fdiv
fstp   Z
```

Quiz Score: **19** out of 21