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

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	43 minutes	21 out of 21

Score for this attempt: **21** out of 21
Submitted Nov 20 at 6:50pm
This attempt took 43 minutes.

Question 1

1 / 1 pts

The _____ operator overrides the default type of a label (variable), and can also be used to combine elements of a smaller data type and move them into a larger operand.

- TYPE
- LENGTHOF
- SIZEOF

Correct!

- PTR
- OFFSET

Question 2

1 / 1 pts

The _____ operator returns the distance in bytes, of a label from the beginning of its enclosing segment, added to the segment register.

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

Question 3

1 / 1 pts

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

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

Question 4

1 / 1 pts

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

EDX

Correct!

ESI

ESP

EDI

Question 5

1 / 1 pts

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

Correct!

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

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

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

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

Question 6

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 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

78563412

78563412h

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
```

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

Correct!

12

orrect Answers

12 (with margin: 0)

Question 9

2 / 2 pts

Given the following array declaration:

```
.data
matrix    DWORD    50 DUP(10 DUP(?))
```

If **matrix[0][0]** is the 0th sequentially stored BYTE in memory, which sequentially stored BYTE is the first byte corresponding to matrix[6][4]? (in decimal - ignore the .0000 from Canvas)

Correct!

256

orrect Answer

256

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    11 DUP(36 DUP(?))
```

Correct!

792

orrect Answer

792

Question 11

2 / 2 pts

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

```
(13 + 14 - 3 + 2) / 2 ^ 3
```

- 13 14 + 3 2 - + 2 3 ^ /
- 13 14 + 3 - 2 + 2 3 / ^
- 13 14 + 3 2 + - 2 3 ^ /

Correct!

- 13 14 + 3 - 2 + 2 3 ^ /

Question 12

2 / 2 pts

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

```
2 3 ^ 5 4 * / 10 +
```

- 2 ^ 3 / 5 * 4 + 10
- 2 ^ 3 / 5 * (4 + 10)

Correct!

- 2 ^ 3 / (5 * 4) + 10
- 2 ^ (3 / (5 * 4)) + 10

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
fadd
fld   C
fsub
fld   D
fmul
fld   E
fdiv
fstp  Z
```

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

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
fdiv
fld    E
fmul
fstp
```

Quiz Score: **21** out of 21