Pre-Lecture 2

Due Aug 21 at 9am Points 14 Questions 14

Available until Aug 21 at 9am Time Limit None Allowed Attempts 2

Instructions

Take this quiz *after you have watched the required videos and/or read the associated sections of the textbook.* See <u>Lecture 2: Representing numbers</u>.

You may attempt this quiz twice. Incorrect responses are marked after each attempt. Correct answers are revealed at the start of class for this lecture.

Carefully note the deadline for responses. Submissions are not accepted after the deadline, and there is no grace period.

This quiz was locked Aug 21 at 9am.

Attempt History

	Attempt	Time	Score	
KEPT	Attempt 2	5 minutes	14 out of 14	
LATEST	Attempt 2	5 minutes	14 out of 14	
	Attempt 1	2,156 minutes	13.6 out of 14	

Score for this attempt: **14** out of 14 Submitted Aug 20 at 10:44pm This attempt took 5 minutes.

The following five questions assess your understanding of the **C basics** material covered in class for Lecture 1.

Question 1 1 / 1 pts

	What is the exact defau gcc compiler?	It name of the executable program generated by the
Correct!	a.out	
orrect Answe	rs a.out	

	Question 2	1 / 1 pts
	Which of the following format specifiers for printf is used to print an variable's value?	integer
	○ %c	
Correct!	● %d	
	○ %f	
	○ %p	
	○ %s	

Question 3	1 / 1 pts
Which of the following format specifiers for printf is used to print variable's address?	an integer
○ %c	
○ %d	
○ %f	

Correct!

○ %s

	Question 4	1 / 1 pts
	Suppose that we have a pointer variable <i>int* p</i> . Which of the followin expressions give the value stored at the address represented by <i>p</i> ? all that apply.)	
	□р	
	□ &p	
Correct!	✓ p[0]	
	□ p[1]	
Correct!	'	
Correct!	✓ *(p+0)	
	*(p+1)	

Question 5 1 / 1 pts

Suppose that we have the following C statements:

```
int arr[6] = { 4, 8, 15, 16, 23, 42 };
int* ptr = arr;
```

Which of the following expressions have a value that is unpredictable? (Select all that apply.)

The following nine questions assess your understanding of the *representing numbers* material covered in the videos as well as Chapter 2 of the textbook.

Question 6

Give the exact 8-bit unsigned binary representation of decimal value 144.

Correct!

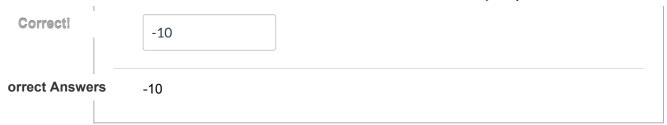
10010000

1/1 pts

10010000

Question 7 1 / 1 pts

What signed decimal integer is represented by 8-bit two's complement binary 11110110?



Question 8

Fill in the blank to make the expression x * ____ equivalent to the following C expression:

(x << 3) + (x << 1)

Correct!

10

Suppose that we have the following C statements:

int i = -1;
unsigned int u = i;

The value of *u* is negative.

True

False

Question 10 1 / 1 pts

In floating-point representation, the denormalized numbers are uniformly spaced, while the normalized numbers are not uniformly spaced.

Correct!

-	т	_
•)		_
	III	

Question 11 1 / 1 pts

Suppose that we need to represent the decimal value -1.5 as a *normalized* single-precision floating point number. Fill the the blanks:

$$-1.5 = -M * 2^{E} = -($$
 0.5 $+ 1) * 2 0$

exponent **e**, expressed in exactly 8 bits: 01111111 (HINT: The

value in the second blank above is the same as **e** - 127.)

Answer 1:

Correct!

0.5

orrect Answer

.5

orrect Answer

1/2

Answer 2:

Correct!

0

	Answer 3:
Correct!	1
	Answer 4:
Correct!	01111111
	Answer 5:
Correct!	10000000000000000000

Question 13 Give the exact single-precision floating point representation for negative infinity, using hexadecimal. Ox ff800000 Answer 1: FF800000

Correct!

orrect Answer	ff800000			

	Question 14 1/1 p	ts
	If we were looking at the bytes stored in memory to determine the value of a variable, for which of the following data types would we need to know the endian-ness of our machine? (Select all that apply.)	1
	□ char	
orrect!	✓ float	
orrect!	✓ int	

Quiz Score: 14 out of 14