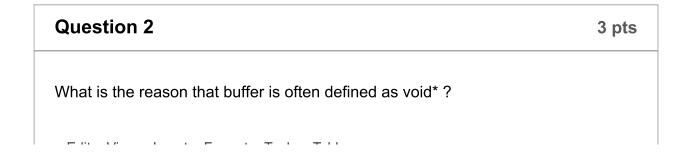
Exam-2.2

Started: Jul 11 at 9pm

Quiz Instructions

Question 1	3 pts
You have the following code in your C program	
char *x = "hello\n";	
char x1[] = "hello\n";	
Which segments are the values of x and x1 stored in memory, respecti	ively?
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Question 3 pts

You defined two buffers in your code

Now, write a code to copy buf2 to buf1 and make buf1 as {'a','a','b','b','b','a','a', using memcpy function.

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Question 4 3 pts

Given an integer A=0x44113322, write its four bytes in the correct order in the memory according to the big endian system, assuming the memory address increases from the left to the right.

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Question 5 3 pts

What are file descriptors?

Question 6 3 pts

Where is the main difference between the command next(n) and step(s) in gdb

Question 7 5 pts

Convert the decimal number 300 into hexadecimal, and then directly convert the hexadecimal representation into a binary representation. Show your work.

Question 8 5 pts

Assume that a file has the following access policy

rwxrw---x

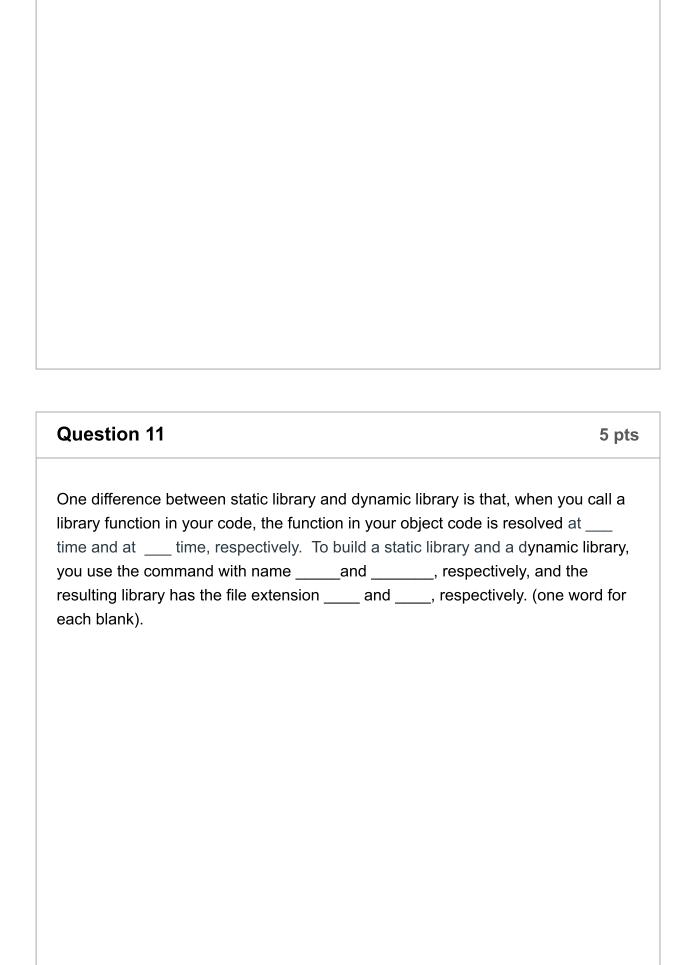
Explain the above access policy for the file.

Question 9 5 pts Given the decimal number 30, whose binary representation is (00011110), in an 8-bit system, what is the binary representation of -30 according to two's complement number system? Show your work.

Explain blocking I/O, Non-blocking I/O and Asynchronous I/O

5 pts

Question 10



Question 12 7 pts

The following questions are all concerning Cache.

- (a) Name the two types of cache locality and briefly explain the intuitions behind them (one sentence for each).
- (b) If the cache adopts the LFU policy, what does it mean?
- (c) Assume a memory access to main memory on a cache "miss" takes 100 ns and a memory access to the cache on a cache "hit" takes 5 ns. If 80% of the processor's memory requests result in a cache "hit", what is the average memory access time?

Quiz saved at 9:00pm

Submit Quiz