This quiz has been regraded; your score was affected.

Quiz 3 (Spring 2025)

- Due Mar 6 at 6:30pm
- Points 20
- Questions 10
- Available Mar 6 at 5:30pm - Mar 11 at 11:55pm
- Time Limit 20 Minutes

Instructions

By taking this quiz, you confirm you are in the classroom unless you have specific permission to take it remotely.

You are expected to take this quiz with no outside help, no internet resources. It is closed book, closed notes, closed Discord, etc. Once you start this quiz, keep your computer focused on this quiz. Do not open any other windows while taking the quiz.

Good Luck.

This quiz was locked Mar 11 at 11:55pm.

Attempt History

	Attempt	Time	Score	Regraded
LATEST	Attempt 1	7 minutes	12 out of 20	14 out of 20

Score for this quiz: 14 out of 20
Submitted Mar 6 at 5:55pm
This attempt took 7 minutes.

Question 1
0 / 2 pts

Suppose I have a file numbers.dat with the numbers 1 through 100 sorted, one number per line. What will be printed on the screen if I type this command sequence:

$ more numbers.dat | tail -10 | head -5 | tail -1

- 10

You Answered

- 1

Correct A

- none of these answers is correct

5

Question 2

2 / 2 pts

Consider this complete program

```
#include <iostream>
using namespace std;

int mystery(int a, int & b)
{
   a += 5;
   b += 5;
   return a + b;
}


int main()
{
  int x = 10;
  int y = 20;
  int z = mystery(x, y);
  cout << x << "/" <<  y;
}
```

What prints to the screen?

Correct!

- 10/25
- 40/30
- 35/40
- 30/40

Question 3

Original Score: 0 / 2 pts Regraded Score: 2 / 2 pts

This question has been regraded.

Consider the following segment of code in C++:

```
int nums[10] = {1,2,3,4,5,6,7,8,9,10};
printArray(nums, 5);
```

Also consider the this function:

```
void printArray(int n[ ], int size)
{
     for(int i=0; i < size; i++)
         cout << n[i]<<endl;
}
```

How many numbers will the printArray( ) function actually print out?

- 10
- 1

You Answered

- all the numbers in the array

Correct Answer

- 5

Question 4

2 / 2 pts

Suppose I run the bubble sort function on 10,000 numbers and it takes 2 seconds.

About how long will it take the same function to sort 20,000 numbers?

- 12 seconds
- 4 seconds

Correct!

- 8 seconds
- 24 seconds

Question 5

2 / 2 pts

What is the expected growth rate of the bubble sort algorithm?

- O (n)
- O (n * log(n))

Correct!

- O (n^2)
- Oh No!!!!!!!

Question 6

0 / 2 pts

Suppose I type this at the Linux prompt:

$ ls -l nu .dat

Here is the result of the above command:

-rw-r--r-- 1 steve steve 5000 Mar 8 02:19 numbers.dat

Which of the following is true?

- The largest number is 5000 in numbers.dat

Correct Answer

- The size of numbers.dat is 5000 bytes

You Answered

- There are 5000 numbers in numbers.dat
- I'm hungry for a byte of Snickers bar

Question 7

2 / 2 pts

What can be understood from the following Linux command and result:

$ time sort numbers.dat > sorted.out &

```
real    0m1.593s
user    0m5.128s
sys     0m0.184s
```

Correct!

- The command took about 1.6 seconds to run
- The command took about 6.9 seconds to run (1.6 + 5.1 + 0.2)
- The command took about 0.2 seconds to run
- The command took about 5.1 seconds to run

Question 8

2 / 2 pts

Consider the Linux command listed below. What it the meaning of the "&" at the end of the line?

$ time sort numbers.dat > sorted.out &

real 0m1.593s

user 0m5.128s

sys 0m0.184s

- the correct answer is not listed.
- Linux will give priority to this command
- The command will be continued on another line

Correct!

- Run this command in the background

Question 9

2 / 2 pts

How many parameters does the bubbleSort( ) function need?

- 1

Correct!

- 2
- 3
- 0

Question 10

0 / 2 pts

Suppose I create a program called prog1 that accepts command line parameters. Suppose I type this command at the Linux prompt:

$ prog1 small medium large xtra-large

Suppose there is a line of code in the program that looks like this:

cout << argv[3];

What will be printed to the screen?

Correct Answer

- large

You Answered

- the correct answer is not listed
- medium
- small

Quiz Score: 14 out of 20