

Started on Wednesday, September 20, 2017, 1:24 PM

State Finished

Completed on Wednesday, September 20, 2017, 1:44 PM

Time taken 19 mins 54 secs

Grade 36.25 out of 50.00 (73%)

Question **1**

Partially correct

2.50 points out
of 5.00

What must a function have to be considered a recursive function? Select all that apply!

Select one or more:

- ☐ a. An integral return value
- ☐ b. An if statement that stops the recursion
- ☐ c. Maintain the index of the iteration in the recursion
- ☒ d. A function call to itself inside the function ✓

Your answer is partially correct.

You have correctly selected 1.

Question **2**

Correct

10.00 points
out of 10.00

Given the function below, write the output (from cout) of this function.

```
int myFunc(int n)
{
    int result = 0;
    if (n == 0)
        return 0;
    if (n == 1)
```

```

        return 1;
    result = myFunc(n-1) + myFunc(n-2);
    return result;
}
int main()
{
    cout << myFunc(4);
    return 0;
}

```

Answer: 3



Question 3

Correct

5.00 points out of 5.00

Which of the following statements correctly prints out the value that is in the memory address that the pointer p1 is pointing to?

Select one:

- ☒ a. cout << *p1 ✓
- ☐ b. cout << &p1;
- ☐ c. cout << p1;
- ☐ d. cout << int* p1;

Question 4

Partially correct

3.75 points out of 5.00

Which of the following are valid based on the following code segment?

Select all that apply!

```
char aValue = 'A';
```

Select one or more:

- ☐ a. char &freq = *aValue;
- ☐ b. char* freq = aValue;
- ☐ c. char* freq = *aValue;
- ☒ d. char* freq = &aValue ✓
- ☒ e. *aValue = 'B' ✗

Your answer is partially correct.

You have selected too many options.

Question **5**

Correct

10.00 points
out of 10.00

Write C++ code that creates a char variable called **bloodType**, dereferences a given pointer named **gPointer**, and places that value into the variable **bloodType**. The **gPointer** will have been declared and set to point to a value before your code runs.

Your code will be placed inside the main function with all the appropriate #includes.

After your code runs, the following test code will execute:

```
cout << "bloodType = " << bloodType << endl;
```

For example:

Test	Result
<pre>char x = 'a'; char *gPointer = &x;</pre>	<pre>bloodType = a</pre>
<pre>char x = 'o'; char *gPointer = &x;</pre>	<pre>bloodType = o</pre>

Answer: (penalty regime: 0,5,10 ,... %)

```
1 char bloodType;  
2 bloodType = (*gPointer);
```

//

Test	Expected	Got
------	----------	-----

✓	<code>char x = 'a'; char *gPointer = &x;</code>	<code>bloodType = a</code>	<code>bloodType = a</code>	✓
✓	<code>char x = 'o'; char *gPointer = &x;</code>	<code>bloodType = o</code>	<code>bloodType = o</code>	✓
✓	<code>char x = 'b'; char *gPointer = &x;</code>	<code>bloodType = b</code>	<code>bloodType = b</code>	✓

Passed all tests! ✓

Correct

Marks for this submission: 10.00/10.00.

Question 6

Incorrect

0.00 points out of 10.00

Given the array {a, c, d, e, k, m, n}, write in order the values a binary search algorithm will progress through to find the value of a. Include the found value of a at the end of the list. Separate each value with a single comma and no space. Note all letters are lower case. The values are compared by alphabetical order (i.e. $a < b < c < d \dots$).

Example:

Given array {a, b, c, d, e, f, g}; search for e

Your output: d,f,e

Answer: k,d,a



Question 7

Correct

5.00 points out of 5.00

In GDB, what is the name of the command to go into the function for a function call? (write ONE word only)

Answer: step



