

Quiz 5 Version E

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|------------------------|-----------------------------------|--------------------|--------------------------------------|
| Due No due date | Points 8 | Questions 3 | Available after Nov 18 at 1pm |
| Time Limit None | Allowed Attempts Unlimited | | |

Instructions

Quiz for Lecture 5: Recursion

7 points required to pass

Take the Quiz Again

Attempt History

| | Attempt | Time | Score |
|--------|---------------------------|--------------------|--------------|
| LATEST | Attempt 1 | less than 1 minute | 0 out of 8 * |

* Some questions not yet graded

Score for this attempt: **0** out of 8 *

Submitted Nov 28 at 2:30pm

This attempt took less than 1 minute.

Question 1

Not yet graded / 2 pts

Write **a recursive implementation** of this function, that displays to **cout** the first **N** multiples (starting from **1**) of the value **M**, separated with space characters. For example, if **M** is **4** and **N** is **6**, the output should be:

4 8 12 16 20 24

If **N** is less than or equal to **0**, the function should do nothing.

void display_N_multiples_of_M(int M, int N)

```
{  
    // this is the part you have to write as your answer  
}
```

Your Answer:

fdsa

```
if (N <= 0)  
    return  
display_N_multiples_of_M(M, N - 1);  
cout << M * N << ' ';
```

Question 2

Not yet graded / 3 pts

Write **a recursive implementation** of this function, that displays to **cout** the **base 5** representation of its non-negative argument **N**, with a leading **0**. Digits in base 5 are **0, 1, 2, 3, and 4**. Example output:

```
display_N_base_5(0);      // 0  
display_N_base_5(3);      // 03  
display_N_base_5(5);      // 010  
display_N_base_5(68);     // 0233  
void display_N_base_5(unsigned N)  
{
```

```
    // this is the part you have to write as your answer
```

```
}
```

Your Answer:

```
if (N == 0)
    cout << 0;
else {
    display_N_base_5(N / 5);
    cout << N % 5;
}
```

Question 3

Not yet graded / 3 pts

Suppose we have this structure definition, for a node in a singly linked list of **char**:

```
struct cl_node { char data; cl_node *next; };
```

Write **a recursive implementation** of this function, that displays the **char** values in the argument list to **cout in reverse order**. For example, if the argument list contains 'a', 'b', 'c', the function should display **cba** to **cout**. If the argument list is empty, the function should do nothing.

```
void clist_display_reverse(const cl_node *p)
```

```
{
```

```
    // this is the part you have to write as your answer
```

```
}
```

Your Answer:

```
if (p == nullptr)
    return;
clist_display_reverse(p->next);
cout << p->data;
```

Quiz Score: **0** out of 8