

Complete the following program with the given declarations. All user input and output **must** occur in your `main` function. You are permitted to create other functions if you feel they would help you complete the task. Call your C++ file `BigMath`. This is to be submitted to Classroom by the date on the assignment. You are only completing one C++ file for this mini-project.

In your `main` function, display a menu to ask the user for their desired task. They are to first choose their operation and then enter the values required. Their options are listed below. When the process is complete, ask the user if they want to do it again.

Create a class called `BigMath` inside of your program. Your class must contain private attributes for the digit of a given `BigMath` object, as well as a pointer to the next object in the list. Your constructor must take an integer representing a digit and a reference to the next node in the linked list. Assume that the numbers the user enters are positive. Your class must also contain the following operators, as well as any relevant accessor and mutator methods.

Adding two `BigMath` objects together returns a `BigMath` representing the sum.

Subtracting two `BigMath` objects returns a `BigMath` representing the difference. The result can be negative.

This project will be graded on:

1. Documentation (4 points): Your code must be fully commented and employ standard C++-style conventions.
2. User-Friendliness (4 points): All interactions with the user must be clear and unambiguous.
3. Linked list and class structure (8 points): Linked list works properly to store an individual number from the user.
4. Functionality (8 points): Each operator works as expected.

TOTAL: 24 points

Sample output (testing addition only):

Enter first positive integer: 87435704325782438757285045089847

Enter second positive integer: 4523852345234255895

**Sum = 87435704325786962609630279345742**

[illegible]

Enter second positive integer: 1

[illegible]

Sample output (testing subtraction only):

Enter first positive integer: 98765432109876543210

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Enter second positive integer: 9999999999
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Difference = 98765432099876543211

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Enter first positive integer: 10000000000000000
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```
Enter second positive integer: 7
```

Difference = 9999999999999993

```
Enter first positive integer: 12345
```

```
Enter second positive integer: 67890
```

```
Difference = -55545
```