Integer Pointers Program

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CSC 450: Programming III

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CTA 3 Main Program Code

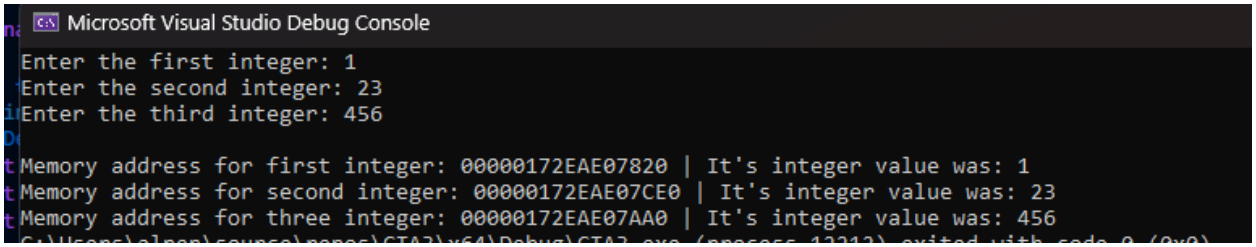
```
//an inclusion package.
#include <iostream>

using namespace std;

//Main function / main entry point.
int main() {
   //Defining some variables to store user inputting ints.
   int numberOne = 0;
   int numberTwo = 0;
   int numberThree = 0;

   /* Here, we ask the user in the console for three integers and store them
   * in the variables we declared above.*/
   cout << "Enter the first integer: ";
   cin >> numberOne;
   cout << "Enter the second integer: ";
   cin >> numberTwo;
   cout << "Enter the third integer: ";
   cin >> numberThree;

   //Defining some pointers for the integers we populated.
   int* numOnePointer = new int(numberOne);
   int* numTwoPointer = new int(numberTwo);
   int* numThreePointer = new int(numberThree);

   //Printing memory addresses and their associated ingeter values.
   cout << "\nMemory address for first integer: " << numOnePointer << " | It's integer value was:
" << numberOne;
   cout << "\nMemory address for second integer: " << numTwoPointer << " | It's integer value
was: " << numberTwo;
   cout << "\nMemory address for three integer: " << numThreePointer << " | It's integer value
was: " << numberThree;


   //Deleting and freeing up that memory!
   delete numOnePointer;
   delete numTwoPointer;
   delete numThreePointer;

   //Waiting for input as to not immediately close the console.
   cin.get();
```

```
    //Main function return statement.
    return 0;
}
```

CTA 3 Main Program Pseudocode

```
//Main function / main entry point.
FUNCTION Main() {
    //Defining some variables to store user inputting ints.
    DEFINE an int called 'numberOne' equal to 0
    DEFINE an int called 'numberTwo' equal to 0
    DEFINE an int called 'numberThree' equal to 0

    /* Here, we ask the user in the console for three integers and store them
    * in the variables we declared above.*/
    PRINT("Enter the first integer: ")
    SET 'numberOne' equal to user's input.
    PRINT("Enter the second integer: ")
    SET 'numberTwo' equal to user's input.
    PRINT("Enter the third integer: ")
    SET 'numberThree' equal to user's input.

    //Defining some pointers for the integers we populated.
    DEFINE a pointer int* called 'numOnePointer' set to address of 'numberOne';
    DEFINE a pointer int* called 'numTwoPointer' set to address of 'numberTwo';
    DEFINE a pointer int* called 'numThreePointer' set to address of 'numberThree';

    //Printing memory addresses and their associated ingeter values.
    PRINT("Memory address for first integer: " + numOnePointer + " | It's integer value was: " +
numberOne)
    PRINT("Memory address for second integer: "+  numTwoPointer + " | It's integer value was: "
+ numberTwo)
    PRINT("Memory address for three integer: " + numThreePointer + " | It's integer value was: "
+ numberThree)


    //Deleting and freeing up that memory!
    DELETE numOnePointer;
    DELETE numTwoPointer;
    DELETE numThreePointer;

    //Waiting for input as to not immediately close the console.
```

Main Program Output Console Screenshot



Github Link

[CSC450_Workspace/CTA3 at main · Alpentater/CSC450_Workspace]