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#include <iostream>
#include <string>

using namespace std;

class Student
{
private:
   char * studentName;
public:
  Student(const char* name)
  {
    cout << "Inside constructor: passed in string = " << name;
    studentName = new char[50];
    strcpy(studentName,name);
    cout << "Initialized string to" << studentName << endl;
  }

  ~Student()
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    cout << "Freeing up memory for string " << studentName << endl;
    delete[] studentName;
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};
```

The destructor has the same name as the class, but with a preceding tilde (~)

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  ~Student()
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The destructor frees up the memory that was allocated for the member variable studentName

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This memory was allocated inside the constructor, and it was freed in the destructor

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BTW, new and delete are the C++ versions of malloc and free. More on them in just a bit.

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int main()
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   const char name[50] = "Vitthal";
   Student student(name);
   student.print();
   cout << "Exiting the program - last line of code. Bye!"<<endl;
   return 0;
}
```

Now, run it and see what happens!

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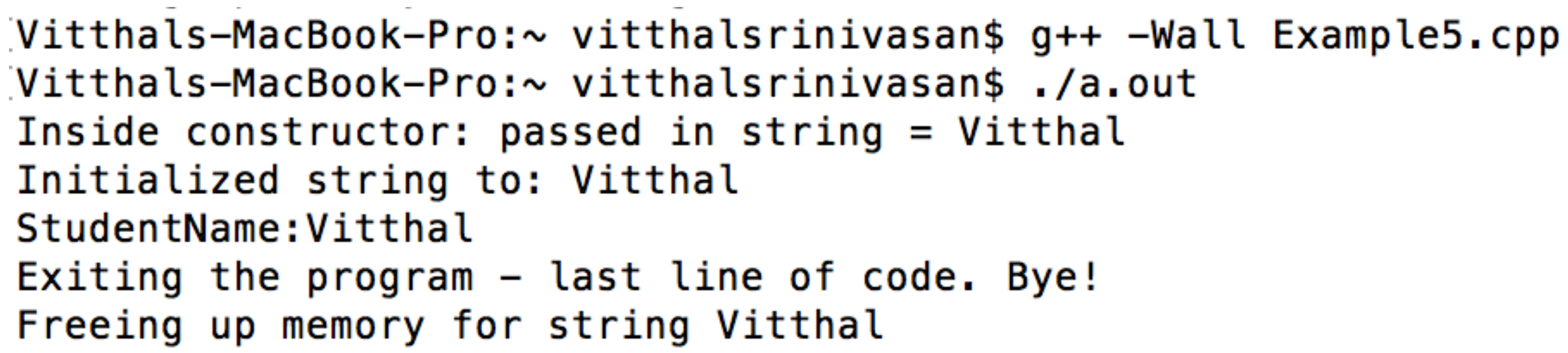

```
Vitthals-MacBook-Pro:~ vitthalsrinivasan$ g++ -Wall Example5.cpp
Vitthals-MacBook-Pro:~ vitthalsrinivasan$ ./a.out
Inside constructor: passed in string = Vitthal
Initialized string to: Vitthal
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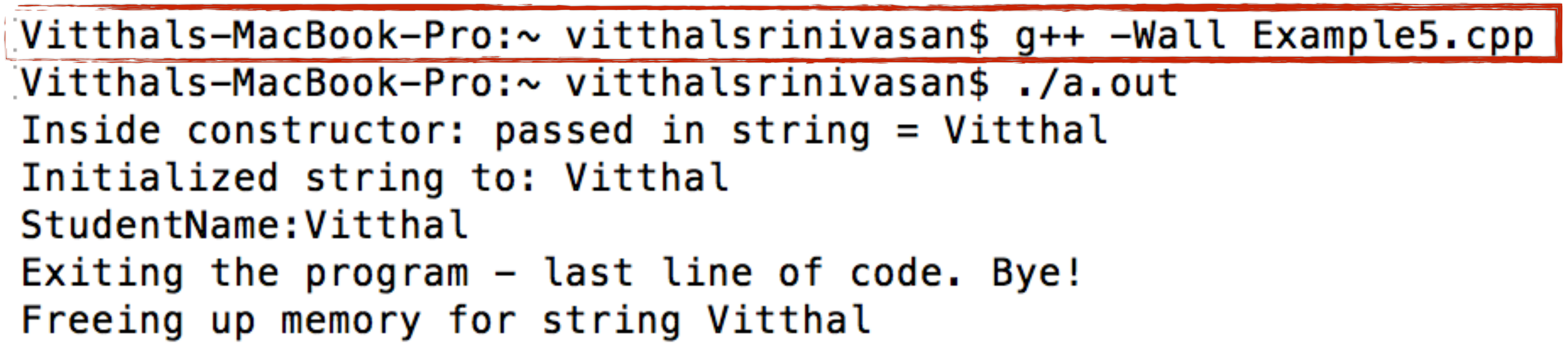
Compile the code first



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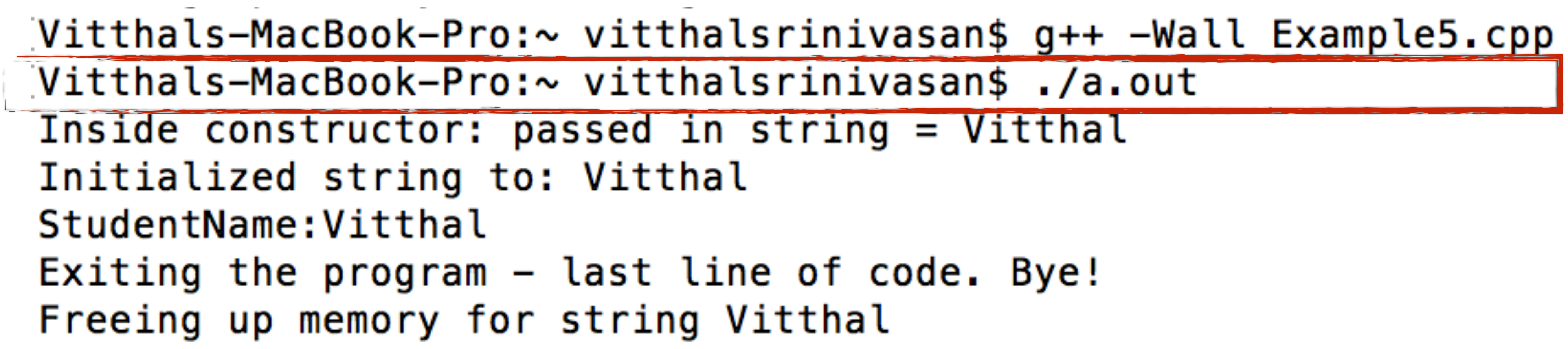

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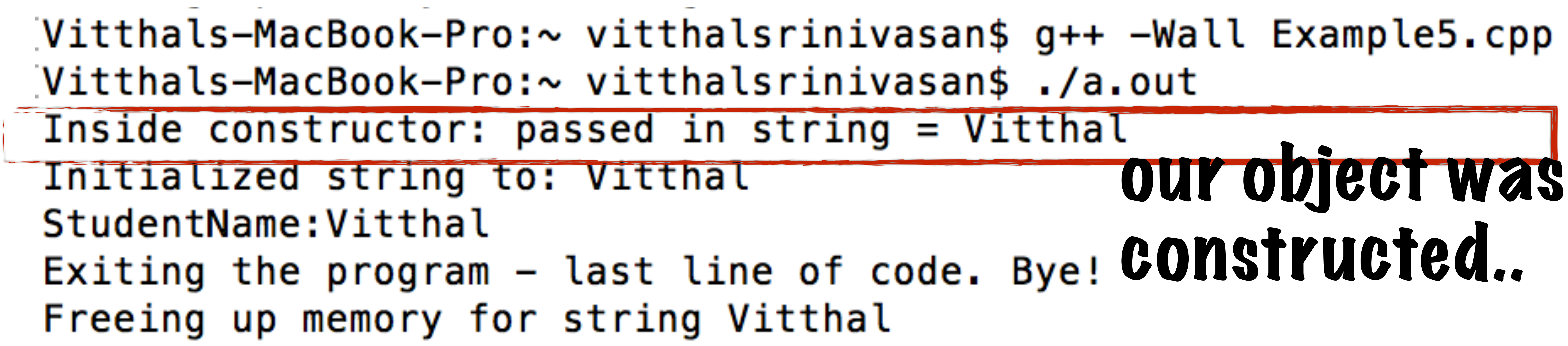

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our object was constructed..

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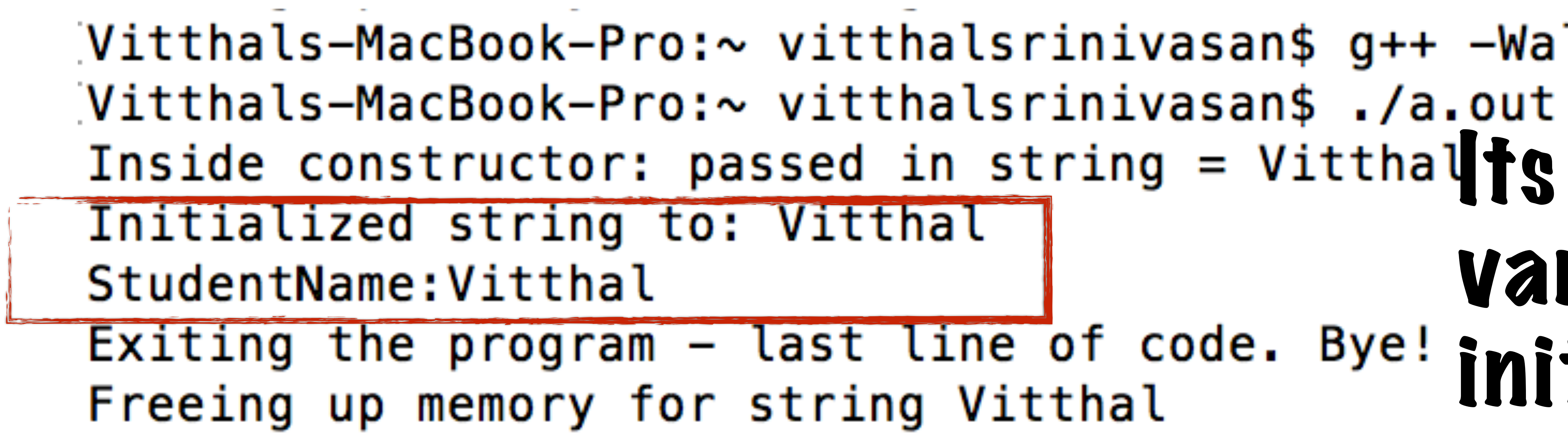

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Its char* member variable was initialised

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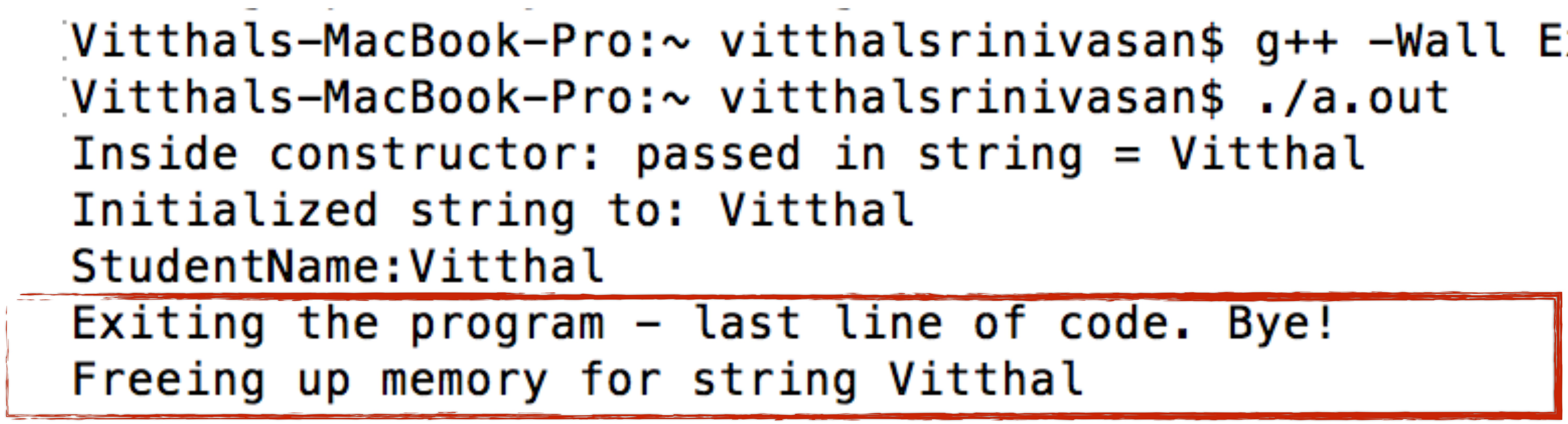

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But what's this? The memory is freed up after the last line of code is executed!

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int main()
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  const char name[50] = "Vitthal";
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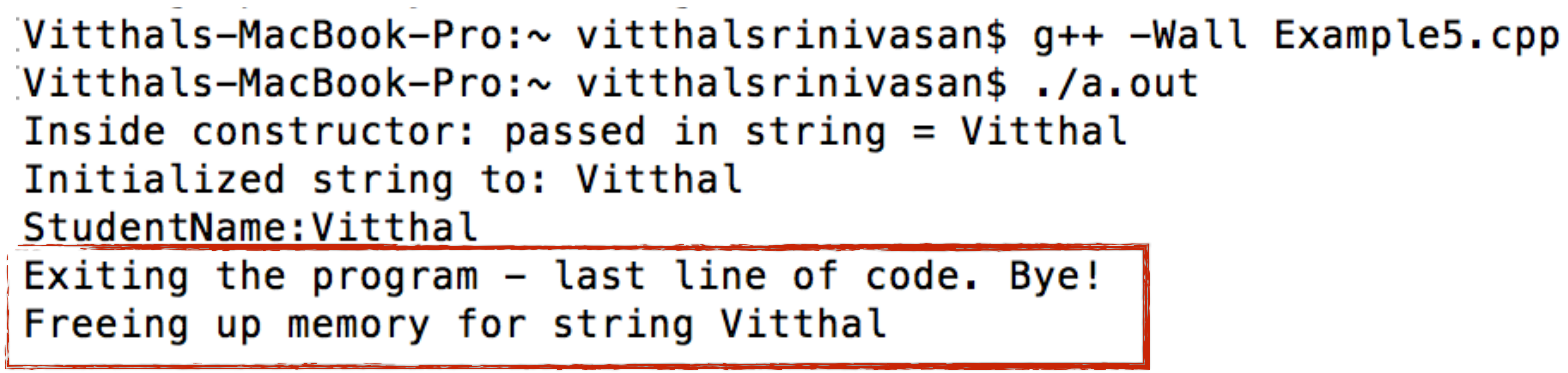

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the destructor got called AFTER the last line of code was executed. In other words, after the closing brace of the main function!

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DESTRUCTORS ARE CRUCIAL WHEN YOUR CLASS HAS POINTERS OR FILE HANDLES AMONG ITS MEMBER VARIABLES.

In such cases, not freeing memory or closing files can lead to serious bugs - and memory and resource leaks.