ENG236 Computer Programming
Solution to Quiz 8 (8 November 2009)

Instructions: open book, 15 minutes

1. (80 marks) Consider the following C++ program and fill in the following missing elements:
   a. Implement the public class function `SetCnt()` which sets the value of the integer pointed to by `count`.
   b. In `main()`, set the value of the integer to 2.
   c. In `main()`, print out the value of the integer to the screen.
   d. In `main()`, release all the memory allocated in the heap before returning 0.

```cpp
#include <iostream>
using namespace std;

class Object
{
public:
    Object();
    ~Object();
    int GetCnt() const {return *count;}
    void SetCnt(int ctr) {*count = ctr;}
private:
    int *count;
};

Object::Object()
{
    count = new int(1);
}

Object::~Object()
{
    delete count;
}

int main()
{
    Object *ptr = new Object;
    ptr->SetCnt(2);
    cout << ptr->GetCnt() << endl;
    delete ptr;
    return 0;
}
```