Q1 You are given the structure for two classes, Borrow and Return, which are used to manage the lending and returning of books in a library system. Your task is to ensure that the total number of available books in the library is correctly updated whenever books are borrowed or returned, without using any global variable.

```
class Borrow {
public:
void borrowBooks(int count);
};

class Return {
public:
void returnBooks(int count);
};
```

Code for only following questions:

1. **Create a Singleton class named 'LibraryInventory' to maintain a count of available books (single integer count).**
2. **Implement the methods for the 'Borrow' and 'Return' classes to interact with the 'LibraryInventory' and demonstrate their usage in a main function.**

```
class LibraryInventory {
private:
    static LibraryInventory* instance;
    int count;
    LibraryInventory() : count(0) {}

public:

    static LibraryInventory* getInstance() {
        if (instance == nullptr) {
            instance = new LibraryInventory();
        }
        return instance;
    }

    void decrementInv(int c) {
        count -= c;

    }

    void incrementInv(int c) {
        count += c;

    }
```

```cpp
};

// Initialize static member of Library Inventory
LibraryInventory* LibraryInventory::instance = nullptr;

class Return {
public:
    void returnBooks(int count) {
        LibraryInventory::getInstance()->incrementInv(count);
    }
};

class Borrow {
public:
    void borrowBooks(intcount) {
        LibraryInventory::getInstance()->decrementInv(count);
    }
};

int main() {
    Return r;
    Borrow b;
     r.returnBooks(5);
     b.borrowBooks(6);

    return 0;
}
```