#include <iomanip>

#include <iostream>

#include <string>

using namespace std;

class Person

{

private:

string name;

int id;

string email;

public:

Person ()

{}

Person(int userID, string userName, string userEmail)

{

name = userName;

id = userID;

email = userEmail;

}

void setName(string userName)

{

name = userName;

}

void setID(int userID)

{

id = userID;

}

void setEmail(string userEmail)

{

email = userEmail;

}

int getID()

{

return id;

}

string getName()

{

return name;

}

string getEmail()

{

return email;

}

};

class Book

{

private:

string title;

string author;

bool status;

Person \*borrower;

public:

Book ()

{}

Book (string bookTitle, string bookAuthor, bool bookStatus)

{

title = bookTitle;

author = bookAuthor;

status = bookStatus;

borrower = NULL;

}

void setTitle(string bookTitle)

{

title = bookTitle;

}

void setAuthor(string bookAuthor)

{

author = bookAuthor;

}

void setStatus(bool bookStatus)

{

status = bookStatus;

}

void setPointer(Person \*bookPointer)

{

borrower = bookPointer;

}

string getTitle()

{

return title;

}

string getAuthor()

{

return author;

}

bool getStatus()

{

return status;

}

Person \*getPointer()

{

return borrower;

}

void checkOut(Person \*user)

{

if(status != true)

{

status = true;

borrower = user;

//return true;

}

else

{

//return false;

}

}

void checkIn()

{

status = false;

borrower = NULL;

}

};

int main()

{

Person people[4];

//bob, mary, george, greg;

people[0] = Person(123, "Bob Fud", "bob@gmail.com");

people[1] = Person(13,"Mary Drive","mary@ddd.com");

people[2] = Person(2, "George Bre", "george@ddd.com");

people[3] = Person(1, "Greg Fry", "greg@yoyoyo.com");

people[3].setName("Nathan Fried");

for (int i = 0; i < 4; i++)

{

cout << left << setw(5) << "Name: " << right << setw(20) << people[i].getName();

cout << left << setw(5) << " ID: " << right << setw(20) << people[i].getID();

cout << left << setw(5) << " Email address: " << right << setw(20) << people[i].getEmail();

cout << endl;

}

Book book[6];

book[0] = Book("Art of War", "Sun Tze", false);

book[1] = Book("Winnie", "George Car", false);

book[2] = Book("Driven Car", "Dan Gaily", false);

book[3] = Book("Stolen dred", "Fred Arm", false);

book[4] = Book("Franzie Derli", "Relindkes", false);

book[5] = Book("Boyish Nred", "Rkdlr", false);

book[0].checkOut(&people[0]);

book[0].checkIn();

book[1].checkOut(&people[3]);

book[2].checkOut(&people[3]);

book[3].checkOut(&people[3]);

book[4].checkOut(&people[2]);

for (int i = 0; i < 6; i++)

{

cout << left << setw(10) <<"Book Title: " << setw(20) << book[i].getTitle();

//cout << left << setw(10) << "Author: " << book[i].getAuthor();

//cout << left << setw(10) <<"Status: " << setw(20) << book[i].getStatus();

Person \*currentPerson = book[i].getPointer();

cout << left << setw(10) <<"Pointer: " << setw(20) << book[i].getPointer();

if(book[i].getPointer() != NULL)

{

cout << "Borrowed by: " << currentPerson->getName();

}

else

{

cout << "Borrowed by: NONE";

}

cout << endl;

}

}