

Lab 4 – Classes and Objects

Instructions: Complete each problem. If you're struggling with a problem, feel free to ask questions on the class forum.

This lab is optional, but it gives you valuable programming experience. You should definitely complete the lab if you can.

Getting Started

Download the Lab4Materials.zip file from the Labs course page. Unzip the file somewhere on your computer. Copy the Lab 4 Help chm file from the Help folder onto your desktop.

Double click the Lab 4 Help file on the desktop to open the file.

If you get an error message in the right-hand pane instead of documentation links, it means you're currently blocking access to the documentation. To fix this, right-click on the Lab 4 Help file on the desktop, select Properties, and select the General tab. Click the Unblock button near the lower right corner of the popup.

Create a new Console Application named Lab4; DON'T call the project something else, it needs to be called Lab4 for the next steps to work properly. Replace the template Program.cs file that was generated when you created the new project with the Program.cs file from the code folder in the zip file.

You should also copy all the other .cs files from the code folder in the zip file into the Lab4 project folder and add it to the project by right clicking the Lab4 project, selecting Add -> Existing Item ... , navigating to the .cs files and adding them.

Problem 1 – Create a deck and print it

Declare a `deck` variable and use the `Deck` constructor to put a new `Deck` object into the `deck` variable.

Print the contents of the deck. Use the help file to figure out which method to use.

Problem 2 – Shuffle the deck and print it

Tell the deck to shuffle itself and print the contents of the deck. Use the help file as necessary to figure out which methods to use.

Problem 3 – Take two cards from the deck and print them

Take a card from the top of the deck and print its rank and suit. Use the help file to figure out which properties to use.

Take another card from the top of the deck and print its rank and suit.

Caution: Section 4.3 in the book discusses how to call different kinds of methods. You may need to review that section to figure out how to do this problem. If you don't own the book, a web search on "Methods (C# Programming Guide)" should lead you to useful information.