Lab 01
Sales Order

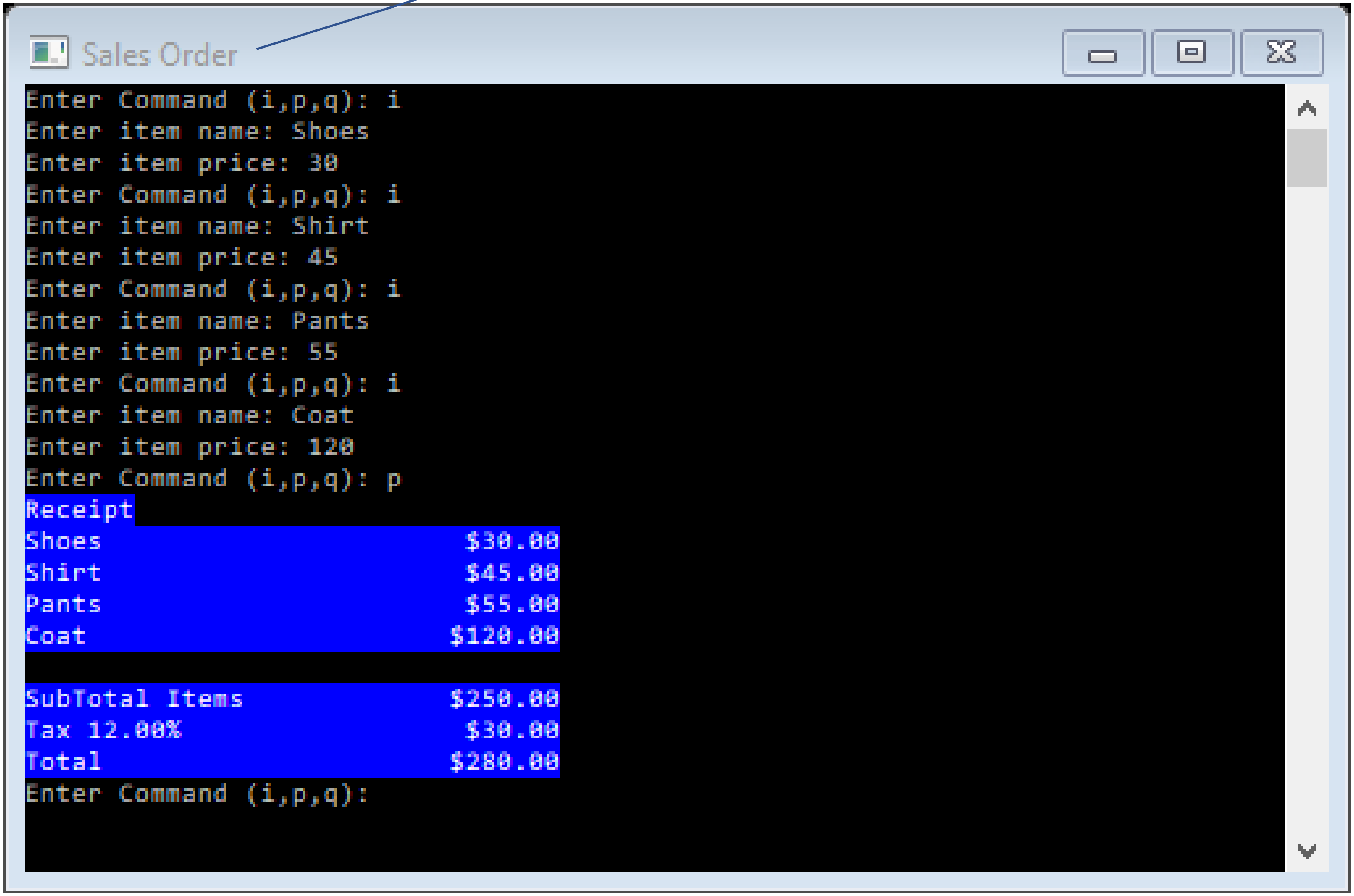
Simple Console App

Sales Order Console Application

- Create Visual Studio Project
  - Console Application
  - Solution name: Lab01SalesOrder
  - Project name: SalesOrder
  - Program name: SalesOrderProgram.cs
  - Create it on your USB drive or OneDrive in your CSIS3540 projects folder
- Description
  - User can enter up to 10 items and their price, print a receipt, or quit
  - Receipt should show all items, subtotal, sales tax, and total
  - Sales tax is 12%
- Project requirements
  - Console title should be **Sales Order**
  - **Use ALL NAMING CONVENTIONS**
  - Users enter **i, p, or q** for commands
    - i – enter item, then prompt for item name and price
    - p – print receipt
    - q – quit
  - Users can enter up to 10 items, and can print the receipt at any time
  - Output must correspond to what is given on the next slide, but different items can and should be used.
  - Console background colors should be set to Blue for receipt ONLY.
    - Hint: use ResetColor() method after receipt prints.
  - **You must use Arrays and Strings/StringBuilder, and not anything from the Collections framework**
    - Do not use ArrayList, List, etc.
  - Format the output EXACTLY, including justification
- Show instructor completed lab for credit. Submit .zip archive of the solution via Blackboard

Sample Output

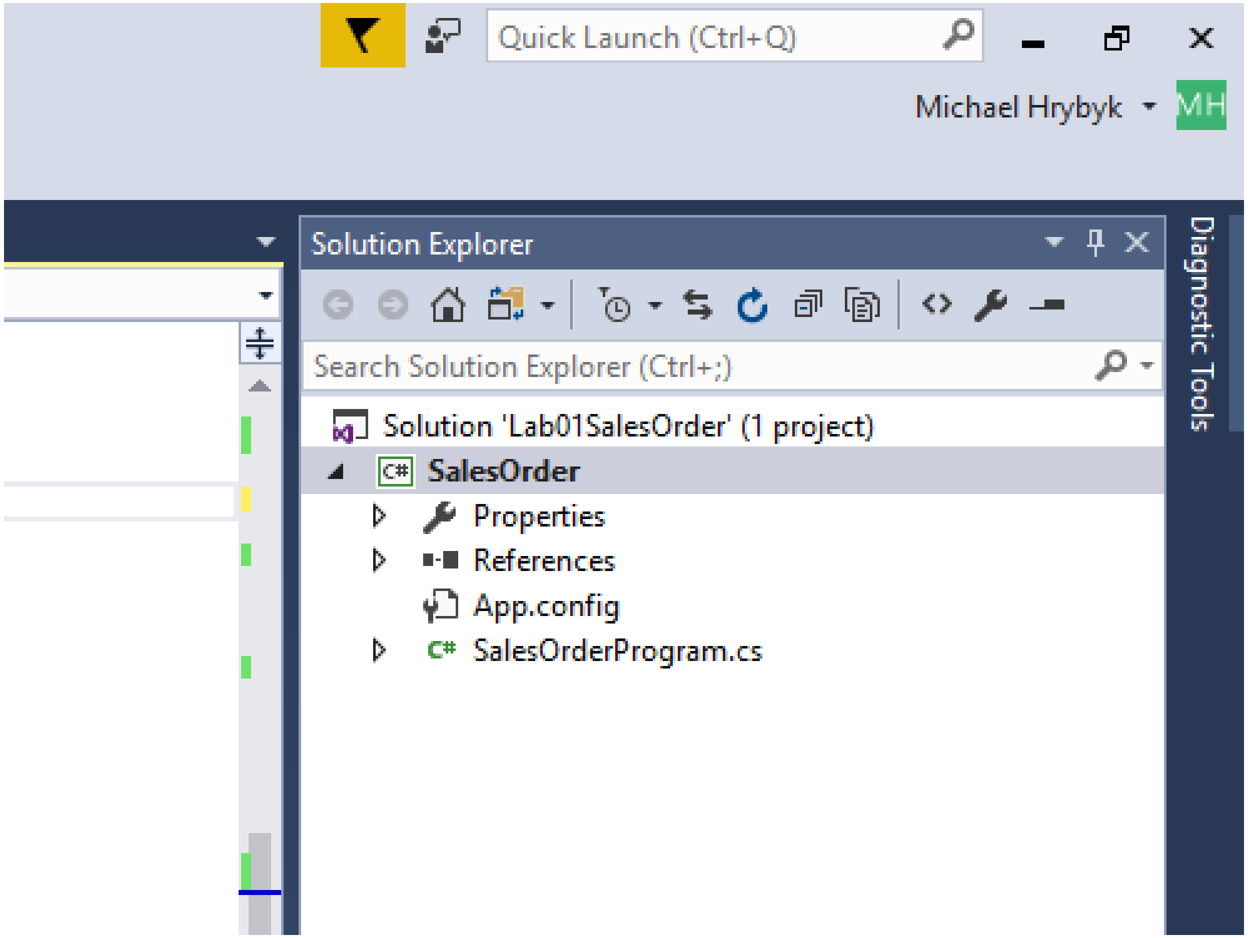
Console.Title is set



```
Enter Command (i,p,q): i
Enter item name: Shoes
Enter item price: 30
Enter Command (i,p,q): i
Enter item name: Shirt
Enter item price: 45
Enter Command (i,p,q): i
Enter item name: Pants
Enter item price: 55
Enter Command (i,p,q): i
Enter item name: Coat
Enter item price: 120
Enter Command (i,p,q): p
Receipt
Shoes                       $30.00
Shirt                       $45.00
Pants                       $55.00
Coat                       $120.00

SubTotal Items             $250.00
Tax 12.00%                  $30.00
Total                      $280.00
Enter Command (i,p,q):
```

Project Setup



Solution 'Lab01SalesOrder' (1 project)
- SalesOrder
  - Properties
  - References
  - App.config
  - SalesOrderProgram.cs

Hints

- Use **using static System.Console;** to avoid having to type Console.WriteLine(), Console.Title, …
- Make sure you set Console.Title or you will lose marks
- Basic control flow is a loop
  - while(input != “q”)
- Give an error message if the number of items is already at 10 and the user tries to enter another.
- Use two arrays, one for items and the other for their prices.
  - Do not use classes and/or Collections (Lists, etc).
- Use StringBuilder or string concatentation to simply add items to the receipt
  - StringBuilder receipt
    - receipt.AppendFormat(formatString, args)
  - Can use String and concatenation as an alternative
    - receipt = receipt + String.Format(formatString, args)
- Formatting
  - Use a const string and positional parameters for the format argument
  - “{0, -2} {1,9}” for example left justifies the first argument with a width of 2, right justifies the second argument with a width of 9.
    - Receipt item line format is **"{0,-25} {1,8:c}“**
    - Percent format (for tax) is **"{0:p}"**
- Console Colors
  - Use Console.BackgroundColor
    - Set to ConsoleColor.Blue
  - Use Console.ResetColor() to restore default.
  - No need to include the Console modifier if you have the **using static System.Console** statement.