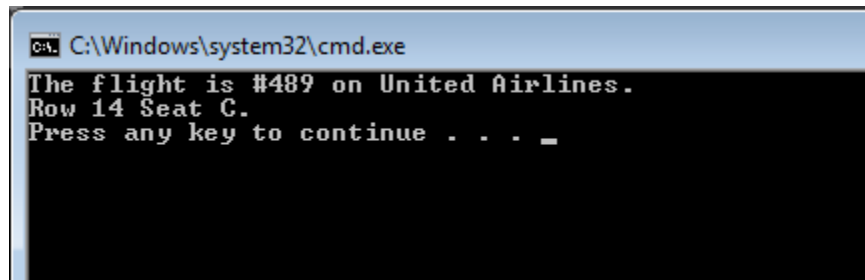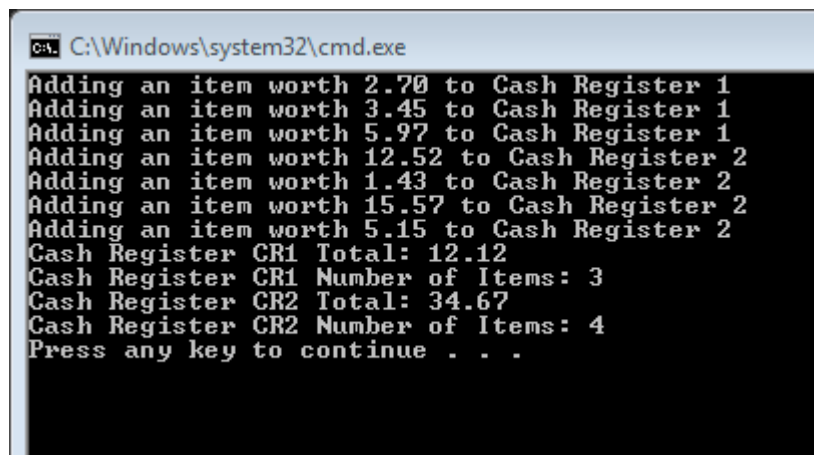**Programming Exercises**

1. Create an application named **TestFlight** that instantiates and displays a `Flight` object. The `Flight` class contains fields for an airline name (a string), flight number (an integer), row (an integer), and seat (a single letter).
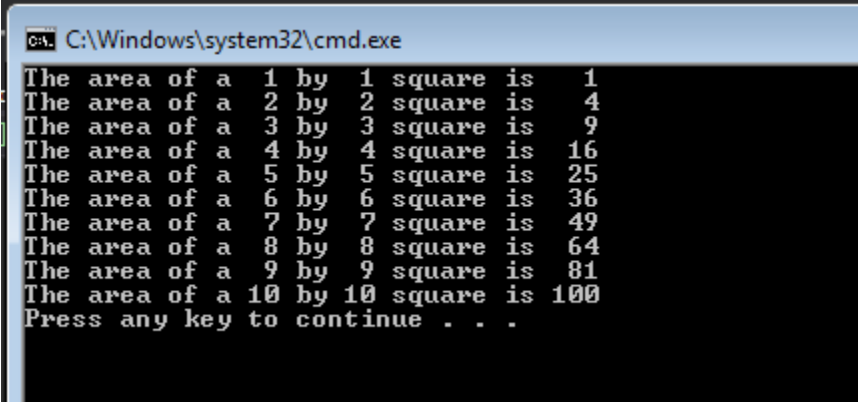


```
C:\Windows\system32\cmd.exe
The flight is #489 on United Airlines.
Row 14 Seat C.
Press any key to continue . . . _
```

2. Create an application named **TestCashRegister** that instantiates and displays a `CashRegister` object. The `CashRegister` class contains a field for a total (a double) and a field for the number of items (an integer). The `CashRegister` class has a method called AddItem that takes in a price, adds it to the total and increments the number of items. The class includes read-only properties to get a `Cash Registers` total cash price and number of items. Create a number of `CashRegister` objects, add a number of items to each and print out the total price and number of items per cash register.


```
C:\Windows\system32\cmd.exe
Adding an item worth 2.70 to Cash Register 1
Adding an item worth 3.45 to Cash Register 1
Adding an item worth 5.97 to Cash Register 1
Adding an item worth 12.52 to Cash Register 2
Adding an item worth 1.43 to Cash Register 2
Adding an item worth 15.57 to Cash Register 2
Adding an item worth 5.15 to Cash Register 2
Cash Register CR1 Total: 12.12
Cash Register CR1 Number of Items: 3
Cash Register CR2 Total: 34.67
Cash Register CR2 Number of Items: 4
Press any key to continue . . .
```

3. Create a program named **DemoSquares** that instantiates an array of 10 Square objects with sides that have values of 1 through 10 and that displays the values for each Square. The Square class contains fields for area and the length of a side, and a constructor that requires a parameter for the length of one side of a Square. The constructor assigns its parameter to the length of the Square's side field and calls a private method that computes the area field. Also include read-only properties to get a Square's side and area.

```
C:\Windows\system32\cmd.exe
The area of a  1 by  1 square is    1
The area of a  2 by  2 square is    4
The area of a  3 by  3 square is    9
The area of a  4 by  4 square is   16
The area of a  5 by  5 square is   25
The area of a  6 by  6 square is   36
The area of a  7 by  7 square is   49
The area of a  8 by  8 square is   64
The area of a  9 by  9 square is   81
The area of a 10 by 10 square is  100
Press any key to continue . . .
```