Final Exam Review Questions  
CSI-154

1. Write a single c# statement that creates an array of integers and initializes it to the following list of values: 3, -7, 23, 12, -4, -18, 28, - 15, 21
2. Write a method that accepts a single dimensional array of integers as a parameter and returns the index of the largest value. (the method is not returning the largest value, it is returning the index of the largest value.
3. Using the out keyword, write a method that takes a single dimensional array of integers as a parameter and returns the the largest value as well as its index as an out parameters.
4. Write a method that takes a single integer parameter size, which indicates size of the array, and returns an array initialized with random numbers between 1 and 49.
5. Write a method that takes an array of integers and display it to a RitchTextBox.
6. Create a windows application a
7. What is a default constructor.
8. How many default constructors can you have in a class.
9. You are asked to write a program that helps a small airline company to deal with seats reservations. Assume you are writing the application for small airplanes, 4 seats per row. Each row has a window seat on the left side (\_leftSideWindowSeat), aisle seat on the left side (\_leftSideAisleSeat), a window seat on the right side (\_rightSideWindowSeat, and an aisle seat on the right side (\_rightSideAisleSeat). Define a class Row that represents a row in an airplane. The row class should define the fields: \_leftSideWindowSeat, \_leftSideAisleSeat, \_rightSideWindowSeat, \_rightSideAisleSeat. These fields should be of type boolean, true if the seat is filled and false if the seat is unfilled. When a Row object is created, all the seats should be unfilled. They should get filled later, when a customer make reservation in Form1.
10. Add properties, get and set for each field
11. In Form1 create an array of Row type to hold 20 Row objects. Row at index 0, represents the first row in an airplane, row at index 1 represents the second row in an airplane, and so on…
12. In Form1\_load fill the array with all 20 Row object, unfilled seats. Use for loop to create all 20 Row objects.. All rows should be created before the customer can reserve a seat. Remember that when a Row object is created, all its seats are open (unfilled) by default.
13. Provide a gui to allow a customer to choose row number and seat (left side window seat, left side ail seat, right side window seat, or right side aisle seat). If the seat is taken, display “seat taken, choose another seat). You should provide a combo box to allow customer to choose seat.
14. Provide a gui to display all the seats (4 seats per row) show an X when the seat is taken and an underscore or dash \_ when the seat is open
15. **Create a windows application**

**Add a class CellPhone.**

Within the class CellPhone defines the private fields:

\_brand

\_carrier

\_price (monthly payment)

\_plan

\_phoneNumber

Add constructor

Add get properties for all fields

Add set property for \_plan

**Add a class Person**

Within the class Person defines the private fields

\_firstname

\_lastname

\_cellPhoneList (is a list of CellPhone)

Define constructor

Define get properties for all the fields (remember not to return \_cellPhoneList)

Define method: AddCellPhone that takes a CellPhone object and adds it to the list

Define method: RemoveCellPhone that removes a CellPhone object from the list

Define method: GetTotalPayment that calculates and returns the total payment this person makes every month, depending on the number of cellphone s/he has.

In Form1: Create a list of Person objects (personList)

In Form1\_load: populate the personList with at least 5 People and each person should have at least 3 cellphones

in Form1\_Design (GUI)

\_Be able to display all the people in the personList within a listbox, which should

contain only last name ,first name, and total monthly payment.

\_Display the cell phones of a person, in another listbox, any time a person is selected in the

First listbox.(brand, carrier, plan, price)

\_Be able to change the plan of any cellphone that is selected in the second listbox.

the list of plans available should be put in a combobox for the user to choose from.