C# programming language, 3 course, final exam

Susanna Harutyunyan

1./30/.Explain overload binary operators in c# programming language, to present examples.

2./30/To present list of all logical, bitwise operators in c# programming language, explain. To present examples. Declaration 1 dimensional array, initialization, to present examples, explain.

3. /30/Declaration 2 dimensional array, to initialize, to present examples, explain, jagged 2 dimensional array, explain, to present example

4./30/ Explain overload ‘true’, ‘false’ operators in c# programming language, to present examples.

5. /30/ Structure of class, constructor, destructor in class, explain, to present examples.

6. /30/Overload methods and constructors in class. To present example, explain.

7. /30/ Explain overload unary operators in c# programming language, to present examples.

8. /30/ method return objects, parameter of method is object, explain, to present examples

9. /30/ where and why using ‘this’ clause in class, explain, to present examples։

10. /30/switch, nested switch –to present example. Break, continue –to present examples, explain.

11./30/static types of variables, methods in class, to present examples, explain

12. /40/Write a program that declare method by name "ff" with a one integer parameter, which recursion through complete 1,1,2,3,5,8,13,21,34 .. gets Fibonacci numbers, that characterized by the fact that every number in it is the sum of the two preceding ones. Function declared as public static. Call function with parameter value 7.

13. /40/ Write a program, that consists from the one-dimensional array of 20 elements that initialized through the method of Random class, so that there is repetitive values. Print the values of array elements, which are repeated 2 or more times, and for each one print repetition number. The selected elements are printed once.

14. /40/ Write a program. In the base class is declared as public integer variable "k" and declared constructor with one integer parameter, which is use to initialize the k variable. In the class declared as public method by name f (int d) {} with one integer parameter, and which has been declared and initialized String type array with 10 values. In method f() need find the values of array, that length are bigger "k" parameter and print these values. In inherited class is declared int k variable, which initialized by constructor of derived class, and inside of this class declared method by name show () {} that prints sum of k variable from base class and variable with the same name of inherited class.

Need call show() {} and f (int d) {} methods.

15. /40/ Write a program. Outside of A class need declare just several objects of class A. Need to write program code within the class, which will calculate the number of objects created outside of A class and print.

17. /40/ Write a program. In class A need to declare method by name public void f(){}. Inside of this method need declare string type of array with 5 values and initialized by inserting family name and name of 5 students. Also declare in method another integer type array with 5 elements, that contain information about the absents of each students from class. All these values of both array need to enter from keyboard. Print the names of the students, whose the absents is larger that int k number, which initialized by constructor of A class.

18./30/By default parameters of methods and constructors in class, restrictions, to preset examples, explain

19./30/ref, out parameters of methods in c#, to present examples, explain

20./30/params parameters of methods in c#, to present examples, explain

21. /30/Converting possibilities of types in c#, to present examples, explain

22. /30/Objects initializer in c#, to present example, explain

23./30/named parameters in methods in c# , to present example, explain

24./30/static class, static constructor –to present examples, explain

25./40/String type variables. To present Substring(), CompareTo() methods. Declare String c[]={"Now","is","the","time","Yerevan","Moskow"}; . Using CompareTo() method sort ‘c’ array in ascendant way (non sensitive).

26. /40/Write program. Create Windows Form Application project. When load application necessary draw triangle with green color

27. /40/ Write program. Create Windows Form Application project. When load application, necessary draw polygon with blue color , that consists with 8 points

28. /40/ Write program. Create Windows Form Application project. Set in form button, label. When push to button, in label field will presented text “welcome in university” and background of form will changes to to yellow.

29. /40/ Write program. Create Windows Form Application project. Insert in form 4 buttons with names « +», « - «, « /», « \*» correspondent to arithmetical operators. Insert into form also 3 TextBox-es. In the two TextBoxes need insert some numbers, in the last TexBox will set result of calculation of two values inserted in TextBoxes and button, that was chooses.

30. /40/ In the class declared 3 double types private variables, that will initialized by constructor with 3 parameters. Declare in class also constructor without parameters. In class necessary declare method by name show(), that print values all those variables. Overload ‘+’ operator. Outside of the class was declare 3 objects of this class- ob1, ob2 and last objects as ob3=ob1+ob2; . Print members-variables of a3 object using show() method.

31. /40/ In the class declared 3 integer types private variables, that will initialized by constructor with 3 parameters. In class necessary declare method by name show(), that print values all those variables. Overload ‘++’ and ‘—“ operators. Outside of the class was declare 2 objects of this class- ob1, ob2. Print consistency of the objects ob1++, ob2-- using show() method.

32. /40/ In the class declared 3 integer private variables, that will initialized by constructor with 3 parameters. In the class necessary declare method by name show(), that print values all those variables. Overload ‘&’ operator. Outside of the class need to declare 2 objects of this class- ob1, ob2 and calculate the bool v=ob&ob2; . Print v .

33. /40/ Write program. Create Windows Form Application project. Create menu, that consist from item File, and sub items ` Open, Save, Exit. Add to the frame of the project RichTexBox. When push to «Open» submenu, will open internet explorer windows, from where possible choose the text file (.txt) and consistency of this file will represent in the RichTexBox.

34. /40/ Write program. Create Windows Form Application project. Create menu, that consist from item File, and sub items ` Open, Save, Exit. Add to the frame of the project RichTexBox. When push to «Save» submenu, will open internet explorer windows. After choosing text file in file system, the text in the the RichTexBox will saved in file.

35. /40/ Write program. Create Windows Form Application project. Create menu, that consist from item File, and sub items ` Exit, Open\_New\_Frame - ից։ When push to ‘Exit’ submenu, application will close, and when push to Open\_New\_Frame submenu will start new frame.