- 1. Try all what we have learned in the lecture
- 2. Design and implement a structure for the employees in a company
- 3. Employee is identified by an ID, security level, salary, hire date and Gender.
- 4. Develop a Structure to represent the HiringDate Data Type consisting of fields to hold the day, month and Years.
- 5. We need to restrict the Gender field to be only M or F [Male of Female] (Parse)
- 6. Assign the security privileges to the employee in a form of byte Flag enum, security privileges are guest, Developer, secretary and DBA.
- 7. We want to provide the Employee structure with the standard capabilities to represent Employee data in a string Form (override ToString ()), display employee salary in a currency format. [use String.Format Function , do you need additional using Directive]
- 8. Create an array of Employees with size three a DBA, Guest and the third one is security officer who have full permissions, (Employee [] EmpArr;)
- 9. Implement All the Necessary Member Functions on the Structure (Getters, Setters)
- 10. Define all the Necessary Constructors for the Structure
- 11. Allow NO RUNTIME errors if the user inputs any data
- 12. Sort the employees based on their hire date
- 13. Print the sorted array.
- 14.-While sorting (how many times Boxing and Unboxing process has occurred)
- 15. Use the XML Comment, help on the meaning of every element, and generate the Help file.
- 16. Write down all the necessary Properties (Instead of setters and getters)
- 17. Define a Class to Speed the Searching for Employees using ID

```
Class EmployeeSearch { int[] NationalIDs ; Employee[] Employees ....}
```

I need to support Searching By NationalID , Hiring Dates , Name (return Employee(s) Object)

Implement All Necessary Indexers