
Deadline – Monday, October 12, 2020**NOTE:**

1. **THIS ASSIGNMENT IS NOT LINKED WITH ASSIGNMENT NO. 4 SO DON'T USE OLD SOLUTION/CODE.**
2. **THIS ASSIGNMENT IS IMPORTANT**

Write a C# Console Application for HR department to analyze the dataset Employee(EmpNo, Name, Designation, Salary, Commission, DeptNo) and Department(DeptNo, DeptName, Location) data.

You need to provide following functionalities:

1. Create department and employee classes override ToString() to print object contents
2. In Main() method take department details from dept.csv as input and initialize DeptList (Dictionary)
Hint:

```
// Open file and Read line by line
while ((deptstring = reader.ReadLine()) != null) {
//line fetched from csv file
//string deptstring = "50,Training,Karad";
// Split details separated by a comma followed by space
string[] deptDetails = deptstring.Split(",");
Department dept = new Department();
dept.DeptNo=int.Parse(deptDetails[0]); dept.DeptName=deptDetails[1];
dept.Location=deptDetails[2];
//add dept object in DeptList
DeptList.Add(10, dept);
}
```
3. In Main() method take employee details from emp.csv as input and initialize EmpList (Dictionary) same like task 2
4. Find location name with single department in the dataset.
 - a. Implement your code into LocationWithSingleDept(DeptList) function.
 - b. You are expected to return list of location in which only one department is given in the data.
 - c. Function return type must be List<String>.
 - d. If any location having multiple departments, then return empty list.
5. Find department names in which no employees
e.g. List<string> FindDeptsWithNoEmps(EmpList)
6. Write function to calculate total salary (Sal+Comm) of all employees
e.g. double Calculate_Total_Salary(EmpList)
7. Write function to display all employees of particular department
e.g. List<Employee> GetAllEmployeesByDept(int DeptNo)
8. Write function to calculate department wise count of employees
e.g. Dictionary<DeptNo,Double> DeptwiseStaffCount(EmpList)
9. Write function to calculate department wise average salary
e.g. Dictionary<DeptNo,Double> DeptwiseAvgSal(EmpList)
10. Write function to calculate department wise minimum salary
e.g. Dictionary<DeptNo,Double> DeptwiseMinSal(EmpList)

git commit -m "Assignment no. 6 completed"

Following C# collections are important:

Dictionary<TKey, TValue>	ArrayList	List<T>
<ul style="list-style-type: none"> + Count: int + Item[TKey]: object + Keys: IList<TKey> + Values: IList<TValue> 	<ul style="list-style-type: none"> + Capacity: int + Count: int + Item[int] + IsFixedSize: bool + IsReadOnly: bool + IsSynchronized: bool + SyncRoot 	<ul style="list-style-type: none"> + Capacity: int + Count: int + Item[int]: object
<ul style="list-style-type: none"> + Add(TKey, TValue): void + Clear(): void + ContainsKey(TKey): bool + ContainsValue(TValue): bool + Remove(TKey): bool + ToString(): string + TryGetValue(TKey, out TValue): bool 	<ul style="list-style-type: none"> + Add(object): int + AddRange(ICollection): int + BinarySearch(object) + Clear(): void + Contains(object): bool + CopyTo(Array): void + IndexOf(object): int + Insert(int, object): void + LastIndexOf(object): int + Remove(object): void + RemoveAt(int): void + RemoveRange(int, int): void + Repeat(obj, int): ArrayList + Reverse(): void + SetRange(int, ICollection): void + Sort(): void + ToArray(): object[] + ToString(): string + TrimToSize(): void 	<ul style="list-style-type: none"> + Add(T): void + AddRange(IEnumerable<T>): void + BinarySearch(T): int + Clear(): void + Contains(T): bool + CopyTo(T[], int): void + Exists(Predicate<T>): bool + Find(Predicate<T>): T + ForEach(Action<T>): void + IndexOf(T): int + Insert(int, T): void + InsertRange(int, IEnumerable<T>): void + Remove(T): bool + RemoveRange(int, int): void + Reverse(): void + Sort(IComparer<T>): void + ToArray(object): object[] + ToString(): string + TrimToSize(): void