

ASSIGNMENT -5

1. Advanced Tuples

Enhance a tuple-based method to improve readability and usability.

Create a method `SplitFullName(string fullName)` that returns a tuple:

Input: "John Doe" → Output: ("John", "Doe")

2. Advanced Partial Classes with Interfaces and Inheritance

Break down a complex class into multiple files while implementing an interface.

- Define a **partial class** `Employee` with an interface `IPerson`.
- Implement `IPerson` to enforce `GetDetails()` method.
- In one file, store basic properties like Name, Department, Salary.
- In another file, implement `GetDetails()` to return formatted employee information.
- Extend `Employee` to create a derived class `Manager`.
- Create instances of `Employee` and `Manager`, calling their methods.

3. Advanced Extension Methods with Generics

- Write an **extension method** `CountOccurrences(this string str, char character)` that counts occurrences of a character in a string.
- Write an extension method by name `CheckEvenCount()` which returns total no of even number present in Array