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# Onspec Tasks Assignment

## 1- Find Target Problem:

```csharp
public static void Main(string[] args)
    {
        int[] numbersList = new int[] { 2,7, 11,15};
        int[] indices = new int[2];
        int target = 9;

        indices = findTarget(numbersList, target);
        Console.WriteLine(indices[0]);
        Console.WriteLine(indices[1]);
    }

    public static int[] findTarget(int[] numbersList, int target)
    {
        int tempSum = 0;
      for(int i =0;i<numbersList.Length;i++)
            for(int k = i+1;k< numbersList.Length; k++)
            {
                tempSum = numbersList[i] + numbersList[k];
                if(tempSum == target)
                {
                    return new int[] {i, k};
                }
            }
        return null;
```

## 2- Find Nth Node:

```csharp
public ListNode removeNthFromEnd(ListNode head, int n)
{
    ListNode start = new ListNode();
    start.next = head;
    ListNode leftSide = start;
    ListNode rightSide = start;

    for (int i = 1; i <= n; ++i){
        rightSide = rightSide.next;
    }

    while (rightSide.next != null){
        rightSide = rightSide.next;
        leftSide = leftSide.next;
    }
    leftSide.next = leftSide.next.next;
    return start.next;
}
```

**3- Database schema:**

```
SELECT D.Name Department, E1.Name Employee, E1.Salary Salary
FROM Department D, Employee E1
WHERE E1.DepartmentId = D.Id
AND(
    SELECT count(distinct Salary)
    FROM Employee E2
    WHERE  E2.DepartmentId = D.Id AND E2.Salary > E1.Salary
    ) < 3
ORDER BY D.Id, E1.Salary desc;
```

**4- Mini Project.**

The project has been submitted on the following link:
https://github.com/MahmoudHassan7/Onspec-Tasks.git"

**Thanks a lot for this nice experience.**