

```
/** https://leetcode.com/problems/split-linked-list-in-parts/
```

```
* Definition for singly-linked list.
```

```
* public class ListNode {
```

```
*     public int val;
```

```
*     public ListNode next;
```

```
*     public ListNode(int val=0, ListNode next=null) {
```

```
*         this.val = val;
```

```
*         this.next = next;
```

```
*     }
```

```
* }
```

```
*/
```

```
public class Solution {
```

```
    public ListNode[] SplitListToParts(ListNode root, int k) {
```

```
        // int N = no of elements
```

```
        // for k = N%k == 0.. k-1
```

```
        // n=11 k=3  n%k==x (0..k-1)
```

```
        // 3 elements each
```

```
        var noOfElements = NoOfItems(root);
```

```
        // var result = new ListNode[k];
```

```
        // Console.WriteLine(noOfElements);
```

```
        var result = FillArrayOfListNodes(root,noOfElements,k);
```

```
        return result;
```

```
    }
```

```
    public ListNode[] FillArrayOfListNodes(ListNode root, int count, int k)
```

```
    {
```

```
        ListNode[] arr = new ListNode[k];
```

```

var additional = count%k; // to get count of left over elements

var fillInEach = count/k; // to get count of elements which would be added at each index in
ListNode[] array

var index = 0;

ListNode temp=null;

while(root!=null)
{

    for(int i=0;i<fillInEach;i++)
    {
        if(temp == null)
        {
            arr[index] = new ListNode(root.val);

            temp = arr[index];

            root=root.next;
        }
        else
        {
            temp.next = new ListNode(root.val);

            temp=temp.next;

            root=root.next;
        }
    }

    if(additional-- > 0)
    {
        if(arr[index] == null)
        {
            arr[index] = new ListNode(root.val);
        }
    }
}

```

```
        else
        {
            temp.next = new ListNode(root.val);
        }
        root=root.next;
    }

    index++;
    temp=null;
}
return arr;
}
```

```
public int NoOfItems(ListNode root)
{
    ListNode temp = root;
    int counter=0;
    while(temp!=null)
    {
        counter++;
        temp = temp.next;
    }
    return counter;
}
}
```