

4.ForEach 操作符实现

ForEach 其实不算操作符，只是一个遍历的静态方法。

其定义如下：

```
public void ForEach(Action<T> action)
{
    if (action == null)
        ThrowHelper.ThrowArgumentNullException(ExceptionArgument.match);
    int version = this._version;
    // 重点
    for (int index = 0; index < this._size && (version == this._version || !
BinaryCompatibility.TargetsAtLeast_Desktop_V4_5); ++index)
        action(this._items[index]);
    if (version == this._version || !
BinaryCompatibility.TargetsAtLeast_Desktop_V4_5)
        return;

    ThrowHelper.ThrowInvalidOperationException(ExceptionResource.InvalidOperation_
EnumFailedVersion);
}
```

非常简单，实现代码如下

```
/* *****
 * http://sikiedu.com liangxie
 * ***** */

using System;
using System.Collections.Generic;
using UnityEngine;

namespace UniRxLesson
```

```

{
    public class ForEachImplementExample : MonoBehaviour
    {
        private void Start()
        {
            var testNumbers = new List<int> {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};

            testNumbers.ListWhere(testNumber => testNumber % 2 == 0)
                .ListSelect(number => number / 2)
//                .ToList() 省略了, 本身就是 List 类型。
                .ListForEach(resultNumber => { Debug.Log(resultNumber); });
        }
    }

    public static class ForEachImplement
    {
        public static void ListForEach<T>(this List<T> sourceList, Action<T>
eachAction)
        {
            foreach (var sourceItem in sourceList)
            {
                eachAction(sourceItem);
            }
        }
    }
}

```

输出结果为:

```

1
2
3
4
5

```

输出与之前的一致。