CancellationToken用于多线程间取消操作的一个检测

**CancellationToken取消令牌**

CancellationToken对象在很多地方都能见到，其用法如下

CancellationTokenSource cancellationTokenSource = new();

CancellationToken cancellationToken = cancellationTokenSource.Token;

Task.Delay(5000).ContinueWith((task) =>

{

    cancellationTokenSource.Cancel();

});

while (true) {

    if (cancellationToken.IsCancellationRequested) {

        Console.WriteLine("Token 已取消");

        break;

    }

    Thread.Sleep(1000);

}

**CancellationToken改变通知**

如果不想主动检测cancellationToken.IsCancellationRequested，希望当cancellationToken改变时主动通知我们，则使用如下方法

CancellationTokenSource cancellationTokenSource = new();

CancellationToken cancellationToken = cancellationTokenSource.Token;

Task.Delay(5000).ContinueWith((task) =>

{

    // 取消

    cancellationTokenSource.Cancel();

});

CancellationChangeToken cancellationChangeToken = new(cancellationToken);

// 当 CancellationToken 改变时会调用函数

cancellationChangeToken.RegisterChangeCallback((state) => {

    // 输出 stateVal

    Console.WriteLine(state);

}, "stateVal");

Console.ReadKey();

Console.WriteLine("程序已退出");