

```

public static class GetContainedNumbersClass
{
    public static IEnumerable<int> GetContainedNumbers(this IEnumerable<string>?
        source)
    {
        IEnumerable<int> GetContainedNumbers_Aux()
        {
            using (var s = source.GetEnumerator())
            {
                while (s.MoveNext())
                {
                    var sb = new StringBuilder();
                    foreach (var c in s.Current)
                    {
                        if(Char.IsDigit(c)) sb.Append(c);
                    }
                    var result = sb.ToString();
                    if (" " == result)
                        throw new ArgumentException("una stringa non contiene
                            numeri");
                    yield return Int32.Parse(result);
                }
            }
        }
        if(null == source)
            throw new ArgumentNullException(nameof(source), "la sequenza non
                può essere nulla");
        return GetContainedNumbers_Aux();
    }
}

public class GetContainedNumbersTest
{
    [Test]
    public void NoNumberInSequence() =>
        Assert.That(() => new[] { "45", "-8gg", "||| sembra ma non lo e'"
        }.GetContainedNumbers().ToArray(), Throws.TypeOf<ArgumentException>());
    [Test]
    public void NormalBehaviour() =>
        Assert.That(new[] { "f55h7", "90", "-45", "H 6YY5"
        }.GetContainedNumbers().ToArray(), Is.EqualTo(new[] { 557, 90, 45, 65
        }));
    [Test]
    public void InfiniteSequenceTest()
    {
        IEnumerable<string> Infinite()
        {
            int i = 0;
            while (true)
            {
                yield return "a" + (i++) + "z";
            }
        }

        var ris = new int[100];

        for (int i = 0; i < ris.Length; i++)
            ris[i] = i;

        Assert.That(Infinite().Take(100).GetContainedNumbers(), Is.EqualTo(ris));
    }
}

```