# Collection接口下方法

#### 实现对象:

```
1 Collection<String> c1 = new ArrayList<>();
```

# 打印效果:

[元素1,元素2.。。。]

```
1 System.out.println(c1);
```

#### 添加元素:

```
1 c1.add("亚瑟");
2 c1.add("鲁班");
3 c1.add("狂铁");
4 System.out.println(c1);
```

#### 元素个数:

```
1 System.out.println(c1.size());
```

#### 添加多个元素:

```
1 Collection<String> c2 = new ArrayList<>();
2 c2.addAll(c1);
3 System.out.println(c2);
```

## 判断是否包含多个元素

```
1 System.out.println(c1.containsAll(c2));
```

### 清空元素

```
1 c2.clear();
2 System.out.println(c2);
```

## 判断是否包含某个元素

```
1 System.out.println(c1.contains("亚瑟"));
2 System.out.println(c1.contains("貂蝉"));
```

## 判断是否为空

```
System.out.println(c1.isEmpty());
System.out.println(c2.isEmpty());
```

#### 删除某个元素

```
1 c1.remove("鲁班");
2 System.out.println(c1);
```

### 删除多个元素

```
1 c1.add("孙尚香");
2 c1.add("大乔");
3 c1.add("小乔");
4 System.out.println(c1);
5 Collection<String> c3 = new ArrayList<>();
6 c3.add("亚瑟");
7 c3.add("狂铁");
8 c1.removeAll(c3);
9 System.out.println(c1);
```

### 保留某些元素

```
1 Collection<String> c4 = new ArrayList<>();
2 c4.add("孙尚香");
3 c1.retainAll(c4);
4 System.out.println(c1);
```

# 集合转数组

```
1 Object[] array1 = c3.toArray();
2 System.out.println(Arrays.toString(array1));
3 String[] array2 = new String[2];
4 c3.toArray(array2);
5 System.out.println(Arrays.toString(array2));
```

## 使用迭代器

```
1 Iterator<String> iterator = c3.iterator();
```

## 获取下一个元素

```
String s = iterator.next();
System.out.println(s);
s = iterator.next();
System.out.println(s);
System.out.println(iterator.hasNext());
```

## 遍历集合

#### 方法1

```
1 Iterator<String> iterator1 = c3.iterator();
2 for (int i = 1; i <= c3.size();i++ ){
3   System.out.println(iterator1.next());
4 }</pre>
```

### 方法2

```
1 //快捷键 itit
2 Iterator<String> iterator2 = c3.iterator();
3 while (iterator2.hasNext()){
4  System.out.println(iterator2.next());
5  }//快捷键 itco
6  for (Iterator<String> stringIterator = c3.iterator(); stringIterator.hasNext(); ) {
7  String next = stringIterator.next();
8 }
```

### 方式3 快速枚举

```
1 //缺点: 不能对集合或数组的个数有影响的操作
2 //快捷键 iter
3 for (String s1 : c3) {
4  System.out.println(s1);
5 }
```