

> a

```
[1] 96 171 202 178 147 102 153 197 127 82 157 185 90 116 172 111 148 213 130  
[20] 165 141 149 206 175 123 128 144 168 109 167 95 163 150 154 130 143 187 166  
[39] 139 149 108 119 183 151 114 135 191 137 129 158
```

> stem(a)

The decimal point is 1 digit(s) to the right of the |

```
8 | 2056  
10 | 2891469  
12 | 378900579  
14 | 1347899013478  
16 | 356781258  
18 | 35717  
20 | 263
```

This is a default case with scale = 1. Usually, the data structure is easily detected in the default case.

> stem(a, scale=2)

The decimal point is 1 digit(s) to the right of the |

```
8 | 2  
9 | 056  
10 | 289  
11 | 1469  
12 | 3789  
13 | 00579  
14 | 1347899  
15 | 013478  
16 | 35678  
17 | 1258  
18 | 357  
19 | 17  
20 | 26  
21 | 3
```

In this case, the data is displayed in more details.

```
> stem(a, scale=0.5)
```

The decimal point is 2 digit(s) to the right of the |

```
0 | 89
1 | 000111122233333444444
1 | 55555555666777777888999
2 | 0011
```

In this case, too few stems are used, and the stem-and-leaf display does not provide much information about the data.

```
> stem(a,scale=3)
```

The decimal point is 1 digit(s) to the right of the |

```
8 | 2
8 |
9 | 0
9 | 56
10 | 2
10 | 89
11 | 14
11 | 69
12 | 3
12 | 789
13 | 00
13 | 579
14 | 134
14 | 7899
15 | 0134
15 | 78
16 | 3
16 | 5678
17 | 12
17 | 58
18 | 3
18 | 57
19 | 1
19 | 7
20 | 2
20 | 6
21 | 3
```

In this case, each stem is divided into two parts. There are too many stems in this plot, resulting in a display that does not tell us much about the shape of the data.