

clptip.r

denis

2021-07-12

```
#!/usr/bin/r
```

```
c(iris[,1:4], cl = iris$Species)
```

```
## $Sepal.Length
```

```
## [1] 5.1 4.9 4.7 4.6 5.0 5.4 4.6 5.0 4.4 4.9 5.4 4.8 4.8 4.3 5.8 5.7 5.4 5.1
## [19] 5.7 5.1 5.4 5.1 4.6 5.1 4.8 5.0 5.0 5.2 5.2 4.7 4.8 5.4 5.2 5.5 4.9 5.0
## [37] 5.5 4.9 4.4 5.1 5.0 4.5 4.4 5.0 5.1 4.8 5.1 4.6 5.3 5.0 7.0 6.4 6.9 5.5
## [55] 6.5 5.7 6.3 4.9 6.6 5.2 5.0 5.9 6.0 6.1 5.6 6.7 5.6 5.8 6.2 5.6 5.9 6.1
## [73] 6.3 6.1 6.4 6.6 6.8 6.7 6.0 5.7 5.5 5.5 5.8 6.0 5.4 6.0 6.7 6.3 5.6 5.5
## [91] 5.5 6.1 5.8 5.0 5.6 5.7 5.7 6.2 5.1 5.7 6.3 5.8 7.1 6.3 6.5 7.6 4.9 7.3
## [109] 6.7 7.2 6.5 6.4 6.8 5.7 5.8 6.4 6.5 7.7 7.7 6.0 6.9 5.6 7.7 6.3 6.7 7.2
## [127] 6.2 6.1 6.4 7.2 7.4 7.9 6.4 6.3 6.1 7.7 6.3 6.4 6.0 6.9 6.7 6.9 5.8 6.8
## [145] 6.7 6.7 6.3 6.5 6.2 5.9
```

```
##
```

```
## $Sepal.Width
```

```
## [1] 3.5 3.0 3.2 3.1 3.6 3.9 3.4 3.4 2.9 3.1 3.7 3.4 3.0 3.0 4.0 4.4 3.9 3.5
## [19] 3.8 3.8 3.4 3.7 3.6 3.3 3.4 3.0 3.4 3.5 3.4 3.2 3.1 3.4 4.1 4.2 3.1 3.2
## [37] 3.5 3.6 3.0 3.4 3.5 2.3 3.2 3.5 3.8 3.0 3.8 3.2 3.7 3.3 3.2 3.2 3.1 2.3
## [55] 2.8 2.8 3.3 2.4 2.9 2.7 2.0 3.0 2.2 2.9 2.9 3.1 3.0 2.7 2.2 2.5 3.2 2.8
## [73] 2.5 2.8 2.9 3.0 2.8 3.0 2.9 2.6 2.4 2.4 2.7 2.7 3.0 3.4 3.1 2.3 3.0 2.5
## [91] 2.6 3.0 2.6 2.3 2.7 3.0 2.9 2.9 2.5 2.8 3.3 2.7 3.0 2.9 3.0 3.0 2.5 2.9
## [109] 2.5 3.6 3.2 2.7 3.0 2.5 2.8 3.2 3.0 3.8 2.6 2.2 3.2 2.8 2.8 2.7 3.3 3.2
## [127] 2.8 3.0 2.8 3.0 2.8 3.8 2.8 2.8 2.6 3.0 3.4 3.1 3.0 3.1 3.1 3.1 2.7 3.2
## [145] 3.3 3.0 2.5 3.0 3.4 3.0
```

```
##
```

```
## $Petal.Length
```

```
## [1] 1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5 1.5 1.6 1.4 1.1 1.2 1.5 1.3 1.4
## [19] 1.7 1.5 1.7 1.5 1.0 1.7 1.9 1.6 1.6 1.5 1.4 1.6 1.6 1.5 1.5 1.4 1.5 1.2
## [37] 1.3 1.4 1.3 1.5 1.3 1.3 1.3 1.6 1.9 1.4 1.6 1.4 1.5 1.4 4.7 4.5 4.9 4.0
## [55] 4.6 4.5 4.7 3.3 4.6 3.9 3.5 4.2 4.0 4.7 3.6 4.4 4.5 4.1 4.5 3.9 4.8 4.0
## [73] 4.9 4.7 4.3 4.4 4.8 5.0 4.5 3.5 3.8 3.7 3.9 5.1 4.5 4.5 4.7 4.4 4.1 4.0
## [91] 4.4 4.6 4.0 3.3 4.2 4.2 4.2 4.3 3.0 4.1 6.0 5.1 5.9 5.6 5.8 6.6 4.5 6.3
## [109] 5.8 6.1 5.1 5.3 5.5 5.0 5.1 5.3 5.5 6.7 6.9 5.0 5.7 4.9 6.7 4.9 5.7 6.0
## [127] 4.8 4.9 5.6 5.8 6.1 6.4 5.6 5.1 5.6 6.1 5.6 5.5 4.8 5.4 5.6 5.1 5.1 5.9
## [145] 5.7 5.2 5.0 5.2 5.4 5.1
```

```
##
```

```
## $Petal.Width
```

```
## [1] 0.2 0.2 0.2 0.2 0.2 0.4 0.3 0.2 0.2 0.1 0.2 0.2 0.1 0.1 0.2 0.4 0.4 0.3
## [19] 0.3 0.3 0.2 0.4 0.2 0.5 0.2 0.2 0.4 0.2 0.2 0.2 0.2 0.4 0.1 0.2 0.2 0.2
## [37] 0.2 0.1 0.2 0.2 0.3 0.3 0.2 0.6 0.4 0.3 0.2 0.2 0.2 0.2 1.4 1.5 1.5 1.3
```

```

## [55] 1.5 1.3 1.6 1.0 1.3 1.4 1.0 1.5 1.0 1.4 1.3 1.4 1.5 1.0 1.5 1.1 1.8 1.3
## [73] 1.5 1.2 1.3 1.4 1.4 1.7 1.5 1.0 1.1 1.0 1.2 1.6 1.5 1.6 1.5 1.3 1.3 1.3
## [91] 1.2 1.4 1.2 1.0 1.3 1.2 1.3 1.3 1.1 1.3 2.5 1.9 2.1 1.8 2.2 2.1 1.7 1.8
## [109] 1.8 2.5 2.0 1.9 2.1 2.0 2.4 2.3 1.8 2.2 2.3 1.5 2.3 2.0 2.0 1.8 2.1 1.8
## [127] 1.8 1.8 2.1 1.6 1.9 2.0 2.2 1.5 1.4 2.3 2.4 1.8 1.8 2.1 2.4 2.3 1.9 2.3
## [145] 2.5 2.3 1.9 2.0 2.3 1.8
##
## $c11
## [1] 1
##
## $c12
## [1] 1
##
## $c13
## [1] 1
##
## $c14
## [1] 1
##
## $c15
## [1] 1
##
## $c16
## [1] 1
##
## $c17
## [1] 1
##
## $c18
## [1] 1
##
## $c19
## [1] 1
##
## $c110
## [1] 1
##
## $c111
## [1] 1
##
## $c112
## [1] 1
##
## $c113
## [1] 1
##
## $c114
## [1] 1
##
## $c115
## [1] 1
##
## $c116
## [1] 1

```

```
##
## $c117
## [1] 1
##
## $c118
## [1] 1
##
## $c119
## [1] 1
##
## $c120
## [1] 1
##
## $c121
## [1] 1
##
## $c122
## [1] 1
##
## $c123
## [1] 1
##
## $c124
## [1] 1
##
## $c125
## [1] 1
##
## $c126
## [1] 1
##
## $c127
## [1] 1
##
## $c128
## [1] 1
##
## $c129
## [1] 1
##
## $c130
## [1] 1
##
## $c131
## [1] 1
##
## $c132
## [1] 1
##
## $c133
## [1] 1
##
## $c134
## [1] 1
```

```
##
## $c135
## [1] 1
##
## $c136
## [1] 1
##
## $c137
## [1] 1
##
## $c138
## [1] 1
##
## $c139
## [1] 1
##
## $c140
## [1] 1
##
## $c141
## [1] 1
##
## $c142
## [1] 1
##
## $c143
## [1] 1
##
## $c144
## [1] 1
##
## $c145
## [1] 1
##
## $c146
## [1] 1
##
## $c147
## [1] 1
##
## $c148
## [1] 1
##
## $c149
## [1] 1
##
## $c150
## [1] 1
##
## $c151
## [1] 2
##
## $c152
## [1] 2
```

```
##
## $c153
## [1] 2
##
## $c154
## [1] 2
##
## $c155
## [1] 2
##
## $c156
## [1] 2
##
## $c157
## [1] 2
##
## $c158
## [1] 2
##
## $c159
## [1] 2
##
## $c160
## [1] 2
##
## $c161
## [1] 2
##
## $c162
## [1] 2
##
## $c163
## [1] 2
##
## $c164
## [1] 2
##
## $c165
## [1] 2
##
## $c166
## [1] 2
##
## $c167
## [1] 2
##
## $c168
## [1] 2
##
## $c169
## [1] 2
##
## $c170
## [1] 2
```

```
##
## $c171
## [1] 2
##
## $c172
## [1] 2
##
## $c173
## [1] 2
##
## $c174
## [1] 2
##
## $c175
## [1] 2
##
## $c176
## [1] 2
##
## $c177
## [1] 2
##
## $c178
## [1] 2
##
## $c179
## [1] 2
##
## $c180
## [1] 2
##
## $c181
## [1] 2
##
## $c182
## [1] 2
##
## $c183
## [1] 2
##
## $c184
## [1] 2
##
## $c185
## [1] 2
##
## $c186
## [1] 2
##
## $c187
## [1] 2
##
## $c188
## [1] 2
```

```
##
## $c189
## [1] 2
##
## $c190
## [1] 2
##
## $c191
## [1] 2
##
## $c192
## [1] 2
##
## $c193
## [1] 2
##
## $c194
## [1] 2
##
## $c195
## [1] 2
##
## $c196
## [1] 2
##
## $c197
## [1] 2
##
## $c198
## [1] 2
##
## $c199
## [1] 2
##
## $c1100
## [1] 2
##
## $c1101
## [1] 3
##
## $c1102
## [1] 3
##
## $c1103
## [1] 3
##
## $c1104
## [1] 3
##
## $c1105
## [1] 3
##
## $c1106
## [1] 3
```

```
##
## $c1107
## [1] 3
##
## $c1108
## [1] 3
##
## $c1109
## [1] 3
##
## $c1110
## [1] 3
##
## $c1111
## [1] 3
##
## $c1112
## [1] 3
##
## $c1113
## [1] 3
##
## $c1114
## [1] 3
##
## $c1115
## [1] 3
##
## $c1116
## [1] 3
##
## $c1117
## [1] 3
##
## $c1118
## [1] 3
##
## $c1119
## [1] 3
##
## $c1120
## [1] 3
##
## $c1121
## [1] 3
##
## $c1122
## [1] 3
##
## $c1123
## [1] 3
##
## $c1124
## [1] 3
```



```
##
## $c1125
## [1] 3
##
## $c1126
## [1] 3
##
## $c1127
## [1] 3
##
## $c1128
## [1] 3
##
## $c1129
## [1] 3
##
## $c1130
## [1] 3
##
## $c1131
## [1] 3
##
## $c1132
## [1] 3
##
## $c1133
## [1] 3
##
## $c1134
## [1] 3
##
## $c1135
## [1] 3
##
## $c1136
## [1] 3
##
## $c1137
## [1] 3
##
## $c1138
## [1] 3
##
## $c1139
## [1] 3
##
## $c1140
## [1] 3
##
## $c1141
## [1] 3
##
## $c1142
## [1] 3
```

```
##
## $cl143
## [1] 3
##
## $cl144
## [1] 3
##
## $cl145
## [1] 3
##
## $cl146
## [1] 3
##
## $cl147
## [1] 3
##
## $cl148
## [1] 3
##
## $cl149
## [1] 3
##
## $cl150
## [1] 3
```

```
clp <- c(iris[,1:4], cl = iris$Species, lower.panel = NULL)
c(0.1, 0.4, class = clp$class,
  col = clp$col, pch = clp$pch,
  title = "Iris data")
```

```
##                                     title
##      "0.1"      "0.4" "Iris data"
```

```
ggplot2::aes(clp, clp)
```

```
## Aesthetic mapping:
## * 'x' -> 'clp'
## * 'y' -> 'clp'
```