R Notebook

This is an R Markdown Notebook. When you execute code within the notebook, the results appear beneath the code.

Try executing this chunk by clicking the Run button within the chunk or by placing your cursor inside it and pressing Ctrl+Shift+Enter.

```
library(ggplot2)
library(MASS)

create variables

mass <- 47.5
age <- 122
mass <- mass * 2.3
age <- age - 20
mass > age

## [1] TRUE

rm(mass,age)

cats

## Sex Bwt Hwt
```

```
## 1
        F 2.0
               7.0
## 2
        F 2.0 7.4
        F 2.0 9.5
        F 2.1
## 4
               7.2
## 5
        F 2.1 7.3
## 6
        F 2.1 7.6
        F 2.1 8.1
## 7
## 8
        F 2.1
               8.2
## 9
        F 2.1 8.3
        F 2.1 8.5
## 10
        F 2.1
## 11
               8.7
        F 2.1
## 12
               9.8
## 13
        F 2.2 7.1
## 14
        F 2.2 8.7
        F 2.2 9.1
## 15
## 16
        F 2.2 9.7
## 17
        F 2.2 10.9
## 18
        F 2.2 11.0
        F 2.3 7.3
## 19
## 20
        F 2.3 7.9
## 21
        F 2.3 8.4
## 22
        F 2.3 9.0
## 23
        F 2.3 9.0
## 24
        F 2.3 9.5
## 25
        F 2.3 9.6
## 26
        F 2.3 9.7
## 27
        F 2.3 10.1
## 28
        F 2.3 10.1
## 29
        F 2.3 10.6
## 30
        F 2.3 11.2
```

```
F 2.4 6.3
## 31
## 32
         F 2.4 8.7
## 33
         F 2.4 8.8
## 34
         F 2.4 10.2
## 35
         F 2.5 9.0
## 36
         F 2.5 10.9
## 37
         F 2.6 8.7
         F 2.6 10.1
## 38
## 39
         F 2.6 10.1
## 40
         F 2.7 8.5
## 41
         F 2.7 10.2
## 42
         F 2.7 10.8
## 43
         F 2.9 9.9
## 44
         F 2.9 10.1
## 45
         F 2.9 10.1
## 46
         F 3.0 10.6
## 47
         F 3.0 13.0
## 48
         M 2.0 6.5
## 49
         M 2.0 6.5
## 50
         M 2.1 10.1
## 51
         M 2.2 7.2
## 52
         M 2.2 7.6
         M 2.2 7.9
## 53
## 54
         M 2.2 8.5
         M 2.2 9.1
## 55
## 56
         M 2.2 9.6
## 57
         M 2.2 9.6
## 58
         M 2.2 10.7
## 59
         M 2.3 9.6
## 60
         M 2.4 7.3
         M 2.4 7.9
## 61
## 62
         M 2.4 7.9
## 63
         M 2.4 9.1
         M 2.4 9.3
## 64
         M 2.5 7.9
## 65
         M 2.5 8.6
## 66
## 67
         M 2.5 8.8
## 68
         M 2.5 8.8
         M 2.5 9.3
## 69
## 70
         M 2.5 11.0
## 71
         M 2.5 12.7
## 72
         M 2.5 12.7
## 73
         M 2.6 7.7
## 74
         M 2.6 8.3
## 75
         M 2.6 9.4
         M 2.6 9.4
## 76
## 77
         M 2.6 10.5
## 78
         M 2.6 11.5
         M 2.7 8.0
## 79
## 80
         M 2.7 9.0
## 81
         M 2.7 9.6
## 82
         M 2.7 9.6
## 83
         M 2.7 9.8
## 84
         M 2.7 10.4
```

```
M 2.7 11.1
## 85
## 86
         M 2.7 12.0
## 87
         M 2.7 12.5
## 88
         M 2.8 9.1
## 89
         M 2.8 10.0
## 90
         M 2.8 10.2
## 91
         M 2.8 11.4
         M 2.8 12.0
## 92
## 93
         M 2.8 13.3
## 94
         M 2.8 13.5
## 95
         M 2.9 9.4
## 96
         M 2.9 10.1
## 97
         M 2.9 10.6
## 98
         M 2.9 11.3
## 99
         M 2.9 11.8
## 100
         M 3.0 10.0
## 101
         M 3.0 10.4
## 102
         M 3.0 10.6
## 103
         M 3.0 11.6
## 104
         M 3.0 12.2
## 105
         M 3.0 12.4
## 106
         M 3.0 12.7
## 107
         M 3.0 13.3
## 108
         M 3.0 13.8
## 109
         M 3.1 9.9
## 110
         M 3.1 11.5
## 111
         M 3.1 12.1
## 112
         M 3.1 12.5
## 113
         M 3.1 13.0
## 114
         M 3.1 14.3
         M 3.2 11.6
## 115
## 116
         M 3.2 11.9
## 117
         M 3.2 12.3
## 118
         M 3.2 13.0
         M 3.2 13.5
## 119
## 120
         M 3.2 13.6
## 121
         M 3.3 11.5
## 122
         M 3.3 12.0
## 123
         M 3.3 14.1
## 124
         M 3.3 14.9
## 125
         M 3.3 15.4
## 126
         M 3.4 11.2
## 127
         M 3.4 12.2
## 128
         M 3.4 12.4
## 129
         M 3.4 12.8
         M 3.4 14.4
## 130
## 131
         M 3.5 11.7
## 132
         M 3.5 12.9
## 133
         M 3.5 15.6
## 134
         M 3.5 15.7
## 135
         M 3.5 17.2
## 136
         M 3.6 11.8
## 137
         M 3.6 13.3
## 138
         M 3.6 14.8
```

To specifyy a colum

```
cats$weight
```

NULL

cats\$coat

NULL

to add a new colum in a dataset

```
cats$weightplus2 <- cats$weight +2
cats$weightplus2</pre>
```

cats

```
##
      Sex Bwt Hwt
## 1
        F 2.0 7.0
## 2
        F 2.0 7.4
## 3
        F 2.0 9.5
## 4
        F 2.1 7.2
## 5
        F 2.1 7.3
## 6
        F 2.1 7.6
## 7
        F 2.1 8.1
## 8
        F 2.1 8.2
        F 2.1 8.3
## 9
## 10
        F 2.1 8.5
## 11
        F 2.1 8.7
        F 2.1 9.8
## 12
## 13
        F 2.2 7.1
## 14
        F 2.2 8.7
## 15
        F 2.2 9.1
## 16
        F 2.2 9.7
        F 2.2 10.9
## 17
## 18
        F 2.2 11.0
## 19
        F 2.3 7.3
## 20
        F 2.3 7.9
## 21
        F 2.3 8.4
## 22
        F 2.3 9.0
## 23
        F 2.3 9.0
## 24
        F 2.3 9.5
## 25
        F 2.3 9.6
## 26
        F 2.3 9.7
## 27
        F 2.3 10.1
## 28
        F 2.3 10.1
## 29
        F 2.3 10.6
## 30
        F 2.3 11.2
## 31
        F 2.4 6.3
## 32
        F 2.4 8.7
## 33
        F 2.4 8.8
```

```
F 2.4 10.2
## 34
## 35
         F 2.5 9.0
## 36
         F 2.5 10.9
## 37
         F 2.6 8.7
## 38
         F 2.6 10.1
## 39
         F 2.6 10.1
## 40
         F 2.7 8.5
         F 2.7 10.2
## 41
## 42
         F 2.7 10.8
## 43
         F 2.9 9.9
## 44
         F 2.9 10.1
## 45
         F 2.9 10.1
## 46
         F 3.0 10.6
## 47
         F 3.0 13.0
## 48
         M 2.0 6.5
## 49
         M 2.0 6.5
## 50
         M 2.1 10.1
## 51
         M 2.2 7.2
## 52
         M 2.2 7.6
         M 2.2 7.9
## 53
## 54
         M 2.2 8.5
## 55
         M 2.2 9.1
         M 2.2 9.6
## 56
## 57
         M 2.2 9.6
## 58
         M 2.2 10.7
## 59
         M 2.3 9.6
## 60
         M 2.4 7.3
## 61
         M 2.4 7.9
## 62
         M 2.4 7.9
## 63
         M 2.4 9.1
         M 2.4 9.3
## 64
## 65
         M 2.5 7.9
## 66
         M 2.5 8.6
## 67
         M 2.5 8.8
         M 2.5 8.8
## 68
## 69
         M 2.5 9.3
## 70
         M 2.5 11.0
## 71
         M 2.5 12.7
## 72
         M 2.5 12.7
## 73
         M 2.6 7.7
## 74
         M 2.6 8.3
         M 2.6 9.4
## 75
## 76
         M 2.6 9.4
## 77
         M 2.6 10.5
## 78
         M 2.6 11.5
         M 2.7 8.0
## 79
## 80
         M 2.7 9.0
## 81
         M 2.7 9.6
         M 2.7 9.6
## 82
## 83
         M 2.7 9.8
## 84
         M 2.7 10.4
## 85
         M 2.7 11.1
## 86
         M 2.7 12.0
## 87
         M 2.7 12.5
```

```
M 2.8 9.1
## 88
## 89
         M 2.8 10.0
         M 2.8 10.2
## 90
## 91
         M 2.8 11.4
## 92
         M 2.8 12.0
## 93
         M 2.8 13.3
## 94
         M 2.8 13.5
         M 2.9 9.4
## 95
## 96
         M 2.9 10.1
## 97
         M 2.9 10.6
## 98
         M 2.9 11.3
## 99
         M 2.9 11.8
## 100
         M 3.0 10.0
## 101
         M 3.0 10.4
         M 3.0 10.6
## 102
## 103
         M 3.0 11.6
## 104
         M 3.0 12.2
## 105
         M 3.0 12.4
## 106
         M 3.0 12.7
## 107
         M 3.0 13.3
## 108
         M 3.0 13.8
## 109
         M 3.1 9.9
## 110
         M 3.1 11.5
## 111
         M 3.1 12.1
## 112
         M 3.1 12.5
## 113
         M 3.1 13.0
## 114
         M 3.1 14.3
## 115
         M 3.2 11.6
## 116
         M 3.2 11.9
## 117
         M 3.2 12.3
         M 3.2 13.0
## 118
## 119
         M 3.2 13.5
## 120
         M 3.2 13.6
## 121
         M 3.3 11.5
         M 3.3 12.0
## 122
## 123
         M 3.3 14.1
## 124
         M 3.3 14.9
## 125
         M 3.3 15.4
## 126
         M 3.4 11.2
## 127
         M 3.4 12.2
## 128
         M 3.4 12.4
## 129
         M 3.4 12.8
## 130
         M 3.4 14.4
## 131
         M 3.5 11.7
## 132
         M 3.5 12.9
## 133
         M 3.5 15.6
## 134
         M 3.5 15.7
## 135
         M 3.5 17.2
## 136
         M 3.6 11.8
## 137
         M 3.6 13.3
## 138
         M 3.6 14.8
## 139
         M 3.6 15.0
## 140
         M 3.7 11.0
## 141
         M 3.8 14.8
```

```
## 142  M 3.8 16.8
## 143  M 3.9 14.4
## 144  M 3.9 20.5

paste("My cat is", cats$coat)

## [1] "My cat is "
x <- 1:5</pre>
```

Add a new chunk by clicking the *Insert Chunk* button on the toolbar or by pressing *Ctrl+Alt+I*.

When you save the notebook, an HTML file containing the code and output will be saved alongside it (click the Preview button or press Ctrl+Shift+K to preview the HTML file).

The preview shows you a rendered HTML copy of the contents of the editor. Consequently, unlike Knit, Preview does not run any R code chunks. Instead, the output of the chunk when it was last run in the editor is displayed.