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
## 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
## 9     F 2.1  8.3
## 10    F 2.1  8.5
## 11    F 2.1  8.7
## 12    F 2.1  9.8
## 13    F 2.2  7.1
## 14    F 2.2  8.7
## 15    F 2.2  9.1
## 16    F 2.2  9.7
## 17    F 2.2 10.9
## 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
## 34    F 2.4 10.2
## 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
## 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
## 53    M 2.2  7.9
## 54    M 2.2  8.5
## 55    M 2.2  9.1
## 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
## 61    M 2.4  7.9
## 62    M 2.4  7.9
## 63    M 2.4  9.1
## 64    M 2.4  9.3
## 65    M 2.5  7.9
## 66    M 2.5  8.6
## 67    M 2.5  8.8
## 68    M 2.5  8.8
## 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
## 75    M 2.6  9.4
## 76    M 2.6  9.4
## 77    M 2.6 10.5
## 78    M 2.6 11.5
## 79    M 2.7  8.0
## 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
```

```
## 85    M 2.7 11.1
## 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
## 92    M 2.8 12.0
## 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
## 115   M 3.2 11.6
## 116   M 3.2 11.9
## 117   M 3.2 12.3
## 118   M 3.2 13.0
## 119   M 3.2 13.5
## 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
## 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
```

To specifcy a colum

```
cats$weight
```

```
## NULL
```

```
cats$coat
```

```
## NULL
```

to add a new colum in a dataset

```
cats$weightplus2 <- cats$weight +2
cats$weightplus2
```

```
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
## 9     F 2.1  8.3
## 10    F 2.1  8.5
## 11    F 2.1  8.7
## 12    F 2.1  9.8
## 13    F 2.2  7.1
## 14    F 2.2  8.7
## 15    F 2.2  9.1
## 16    F 2.2  9.7
## 17    F 2.2 10.9
## 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
```

```
## 34    F 2.4 10.2
## 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
## 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
## 53    M 2.2  7.9
## 54    M 2.2  8.5
## 55    M 2.2  9.1
## 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
## 61    M 2.4  7.9
## 62    M 2.4  7.9
## 63    M 2.4  9.1
## 64    M 2.4  9.3
## 65    M 2.5  7.9
## 66    M 2.5  8.6
## 67    M 2.5  8.8
## 68    M 2.5  8.8
## 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
## 75    M 2.6  9.4
## 76    M 2.6  9.4
## 77    M 2.6 10.5
## 78    M 2.6 11.5
## 79    M 2.7  8.0
## 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
## 85    M 2.7 11.1
## 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
## 92    M 2.8 12.0
## 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
## 115   M 3.2 11.6
## 116   M 3.2 11.9
## 117   M 3.2 12.3
## 118   M 3.2 13.0
## 119   M 3.2 13.5
## 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
## 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
```

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.