A Simple Article

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Contents

1 Getting Started

This is our first section of our article. We will only talk about `data.frame`s.

A new paragraph comes after a blank line.

2 More Information

Here is another section. In section 1 we learned about `data.frame`s.

2.1 First subsection

2.2 SecondSub

More content that is nested in Section 2

3 Diamonds

```
> #load ggplot2
> require(ggplot2)
> data(diamonds)
> head(diamonds)
```

```
# A tibble: 6 ÃŮ 10
  carat       cut color clarity depth table price     x     y     z
  <dbl>     <ord> <ord>   <ord> <dbl> <dbl> <int> <dbl> <dbl> <dbl>
1  0.23     Ideal     E     SI2  61.5    55   326  3.95  3.98  2.43
2  0.21   Premium     E     SI1  59.8    61   326  3.89  3.84  2.31
3  0.23      Good     E     VS1  56.9    65   327  4.05  4.07  2.31
4  0.29   Premium     I     VS2  62.4    58   334  4.20  4.23  2.63
5  0.31      Good     J     SI2  63.3    58   335  4.34  4.35  2.75
6  0.24 Very Good     J    VVS2  62.8    57   336  3.94  3.96  2.48
```

```
> modl <- lm(price ~ carat + cut, data=diamonds)
> summary(modl)

Call:
lm(formula = price ~ carat + cut, data = diamonds)

Residuals:
     Min       1Q   Median       3Q      Max
-17540.7   -791.6    -37.6    522.1  12721.4

Coefficients:
            Estimate Std. Error  t value Pr(>|t|)
(Intercept) -2701.38      15.43 -175.061  < 2e-16 ***
carat        7871.08      13.98  563.040  < 2e-16 ***
cut.L        1239.80      26.10   47.502  < 2e-16 ***
cut.Q        -528.60      23.13  -22.851  < 2e-16 ***
cut.C         367.91      20.21   18.201  < 2e-16 ***
cut^4          74.59      16.24    4.593 4.37e-06 ***
---
Signif. codes:  0 âĂŸ***âĂŹ 0.001 âĂŸ**âĂŹ 0.01 âĂŸ*âĂŹ 0.05 âĂŸ.âĂŹ 0.1 âĂŸ âĂŹ 1

Residual standard error: 1511 on 53934 degrees of freedom
Multiple R-squared:  0.8565,        Adjusted R-squared:  0.8565
F-statistic: 6.437e+04 on 5 and 53934 DF,  p-value: < 2.2e-16
```

The diamonds are plotted in Figure **??**.

```
> ggplot(diamonds, aes(x=carat, y=price, color=color)) + geom_point()
```