Untitled

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

Including Plots

You can also embed plots, for example:

```
## Warning in rbind(names(probs), probs_f): number of columns of result is not
## a multiple of vector length (arg 1)
```

```
## Warning: 68 parsing failures.
## row # A tibble: 5 x 5 col     row      col               expected actual expected   <int>    <chr>
## ... ................. ... ........................................... ........ ..................
## See problems(...) for more details.
```

term	estimate	p.value
(Intercept)	6702	0
VehicleAge	-359.2	0
SizeCROSSOVER	1704	4.88e-69
SizeLARGE	1971	2.649e-311
SizeLARGE SUV	5285	4.501e-267
SizeLARGE TRUCK	3904	0
SizeMEDIUM	1355	3.004e-205
SizeMEDIUM SUV	3377	0
SizeNULL	3051	0.0009891
SizeSMALL SUV	1983	1.505e-130
SizeSMALL TRUCK	1221	2.787e-18
SizeSPECIALTY	3224	1.026e-293
SizeSPORTS	4489	8.658e-177
SizeVAN	1189	4.539e-86
VehicleAge:SizeCROSSOVER	258.2	6.854e-27
VehicleAge:SizeLARGE	-70.82	1.449e-09
VehicleAge:SizeLARGE SUV	-43.47	0.09589

term	estimate	p.value
VehicleAge:SizeLARGE TRUCK	7.466	0.6646
VehicleAge:SizeMEDIUM	-126.1	1.445e-40
VehicleAge:SizeMEDIUM SUV	-73.74	9.098e-09
VehicleAge:SizeNULL	-54.4	0.8297
VehicleAge:SizeSMALL SUV	59.3	0.0002866
VehicleAge:SizeSMALL TRUCK	47.44	0.05784
VehicleAge:SizeSPECIALTY	165.5	5.039e-12
VehicleAge:SizeSPORTS	-353.4	2.453e-34
VehicleAge:SizeVAN	-73.15	8.896e-09

```
knitr::kable(tidy_mod) %>% kable_styling()
```

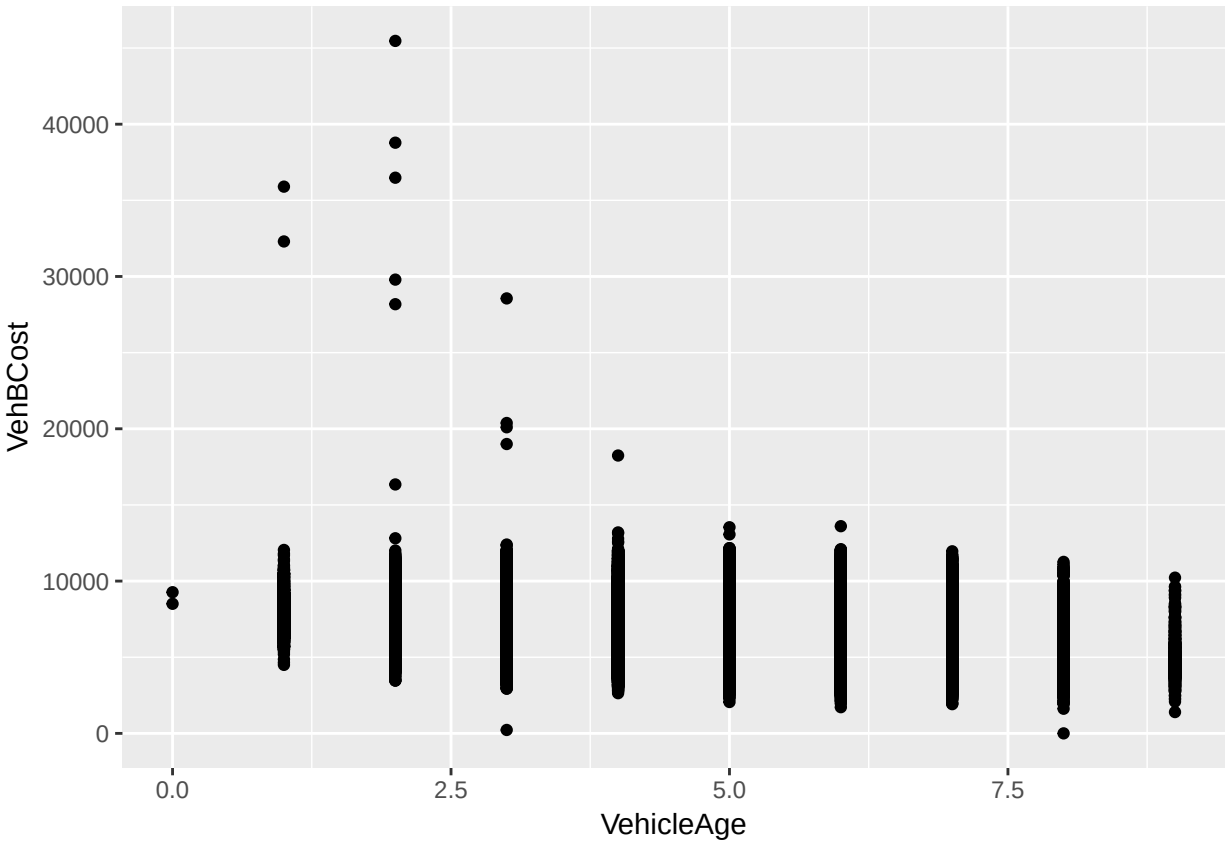
term	estimate	p.value
(Intercept)	6702.090123	0.0000000
VehicleAge	-359.233026	0.0000000
SizeCROSSOVER	1704.166258	0.0000000
SizeLARGE	1971.127086	0.0000000
SizeLARGE SUV	5284.557829	0.0000000
SizeLARGE TRUCK	3903.595135	0.0000000
SizeMEDIUM	1354.867364	0.0000000
SizeMEDIUM SUV	3377.206582	0.0000000
SizeNULL	3050.818968	0.0009891
SizeSMALL SUV	1983.030646	0.0000000
SizeSMALL TRUCK	1220.739978	0.0000000
SizeSPECIALTY	3223.609519	0.0000000
SizeSPORTS	4489.067278	0.0000000
SizeVAN	1189.244999	0.0000000
VehicleAge:SizeCROSSOVER	258.220662	0.0000000
VehicleAge:SizeLARGE	-70.818504	0.0000000
VehicleAge:SizeLARGE SUV	-43.474336	0.0958903
VehicleAge:SizeLARGE TRUCK	7.466474	0.6646077
VehicleAge:SizeMEDIUM	-126.146852	0.0000000
VehicleAge:SizeMEDIUM SUV	-73.738701	0.0000000
VehicleAge:SizeNULL	-54.403338	0.8296956
VehicleAge:SizeSMALL SUV	59.299890	0.0002866
VehicleAge:SizeSMALL TRUCK	47.439386	0.0578413
VehicleAge:SizeSPECIALTY	165.506096	0.0000000
VehicleAge:SizeSPORTS	-353.374675	0.0000000
VehicleAge:SizeVAN	-73.147029	0.0000000

$$y_i = x_i + \beta_1 + \varepsilon_i$$

The β_0 estimate was 6702.

```
ggplot(aes(x = VehicleAge, y = VehBCost), data = cars) +
  geom_point()
```

```
## Warning: Removed 68 rows containing missing values (geom_point).
```



The mean age of the cars was 4.2.

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.