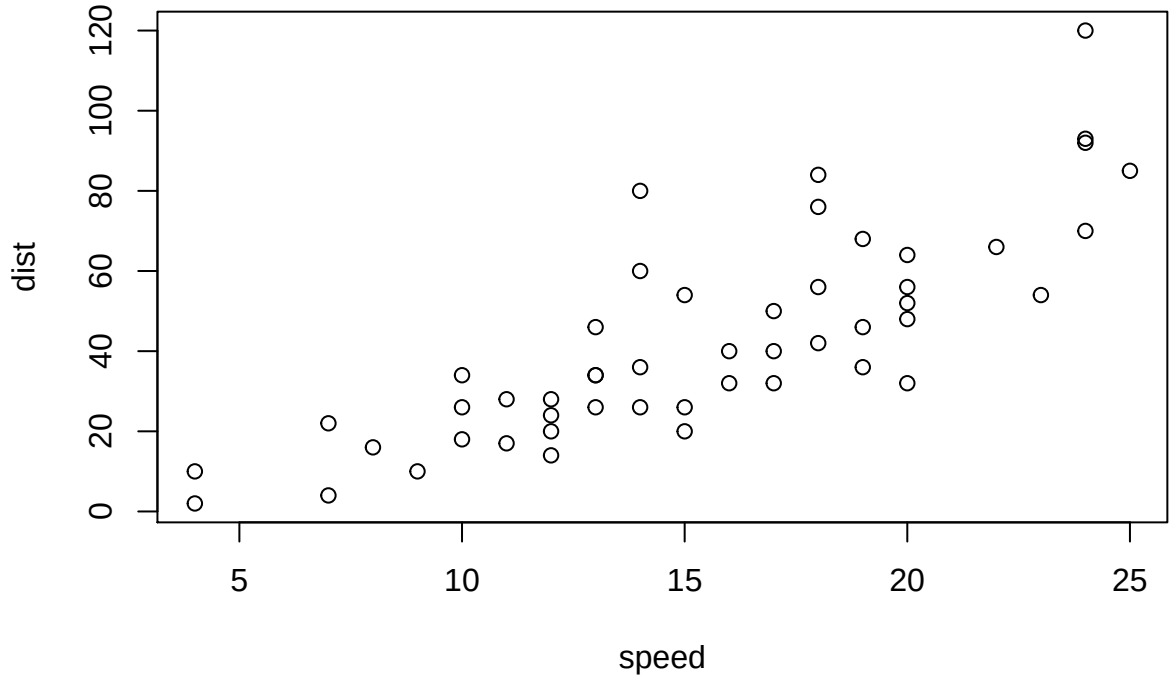
BDA 15: Multiparameter Models

Often we'll have to deal with models containing multiple unknowns. It's usually the case that within these models we're only interested in the posterior distribution of one parameter, which we call the marginal posterior distribution of that parameter.

To obtain the marginal posterior it's first necessary to model the joint posterior distribution over all unknowns. We can then integrate over the other unknowns to get the desired marginal posterior.

The computational equivalent of this procedure is to draw many samples from the joint posterior, and record the parameter of interest each time. In doing this, it's possible to build up a frequency distribution that approximates the marginal posterior of the parameter.

```
plot(cars)
```



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).