TITLE

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I suggest starting with this chunk of code (lines 9-11, not visible on knitted file)

I'll explain what the options mean here:

```
include=FALSE         ## Runs chunk but omits it from final Knitted file.
knitr::opts_chunk$set ## Sets default options for each chunk that follows.
echo=FALSE            ## Do not display code in output.
warning=FALSE         ## Do not display warning in output.
message=FALSE         ## Do not display messages in output.
fig.align='center'    ## Center align any figures (this includes graphs and kables).
```

When you save something as an object, it will not (by default) output the values for the object.

```
#I am forcing the code to display so you can see it.

test<-summary(cars) #this will not be displayed in the knitted file
```

But calling the object by name *will*.

```
#I am forcing the code to display so you can see it.

summary(cars) #This WILL be displayed
```

```
##      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
```

This is why we **DO NOT** call an entire data file name after we have imported it or modified it, but instead use something like `head()` or `tail()` to view only a few cases. For your final reports, however, you should not need to do even that.

The table above looks crude though. We can "pretty" it up using `kable()`. We can do that a few different ways:

```
#I am forcing the code to display so you can see it.

kable(summary(cars)) #This WILL be displayed
```

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

and the way that will be easier for you to do if you've already finished the rest of your report:

```
#I am forcing the code to display so you can see it.
summary(cars) %>%
  kable() #Dropping it on the end also works.
```

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

You may have noticed that I did a direct code quote when I referenced `kable()`. I did it again just now! You can replicate this by using the backtick (it is the same symbol that starts the r chunks, located above the `TAB` key, not to be confused with the apostrophe).

There may be a time you want to reference a specific value from some object you have saved in-text. You can do that by using:

> r object$value # enclosed with backticks.

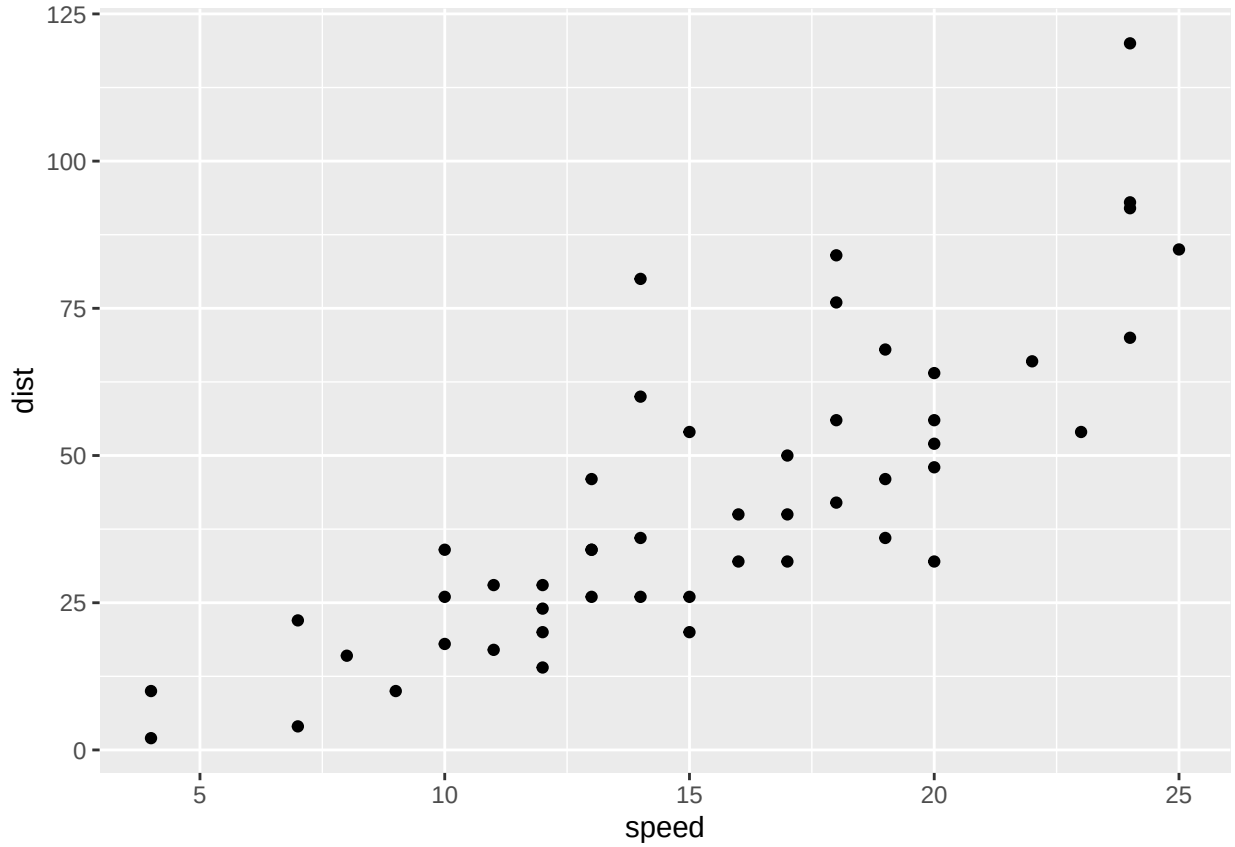
For example, above I saved an object named `test` I can call the speed column by doing **Min. : 4.0 , 1st Qu.:12.0 , Median :15.0 , Mean :15.4 , 3rd Qu.:19.0 , Max. :25.0** .

This is a weird example, but if you wanted to, say, plug in the mean of `speed` from the `cars` dataset (native to R), you could do something like: Mean = 15.4 mph. This can be very convenient if you are running an analysis where the numbers will fluctuate due to randomization (though you could also fix that problem by just fixing the seed value).

If you want to adjust plot sizes, you can do that too.

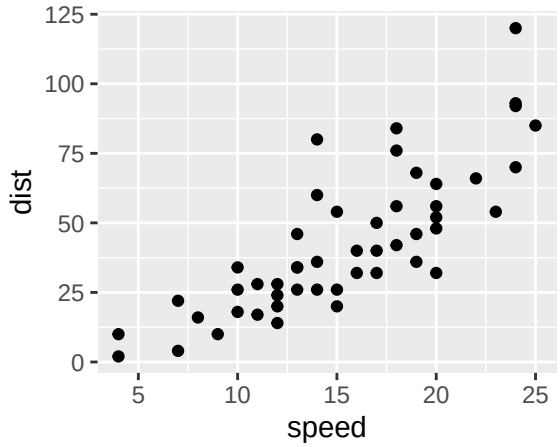
I ran code to generate a scatter plot of `speed` vs `dist` from the `cars` dataset.

here is what it looks like with no modification:

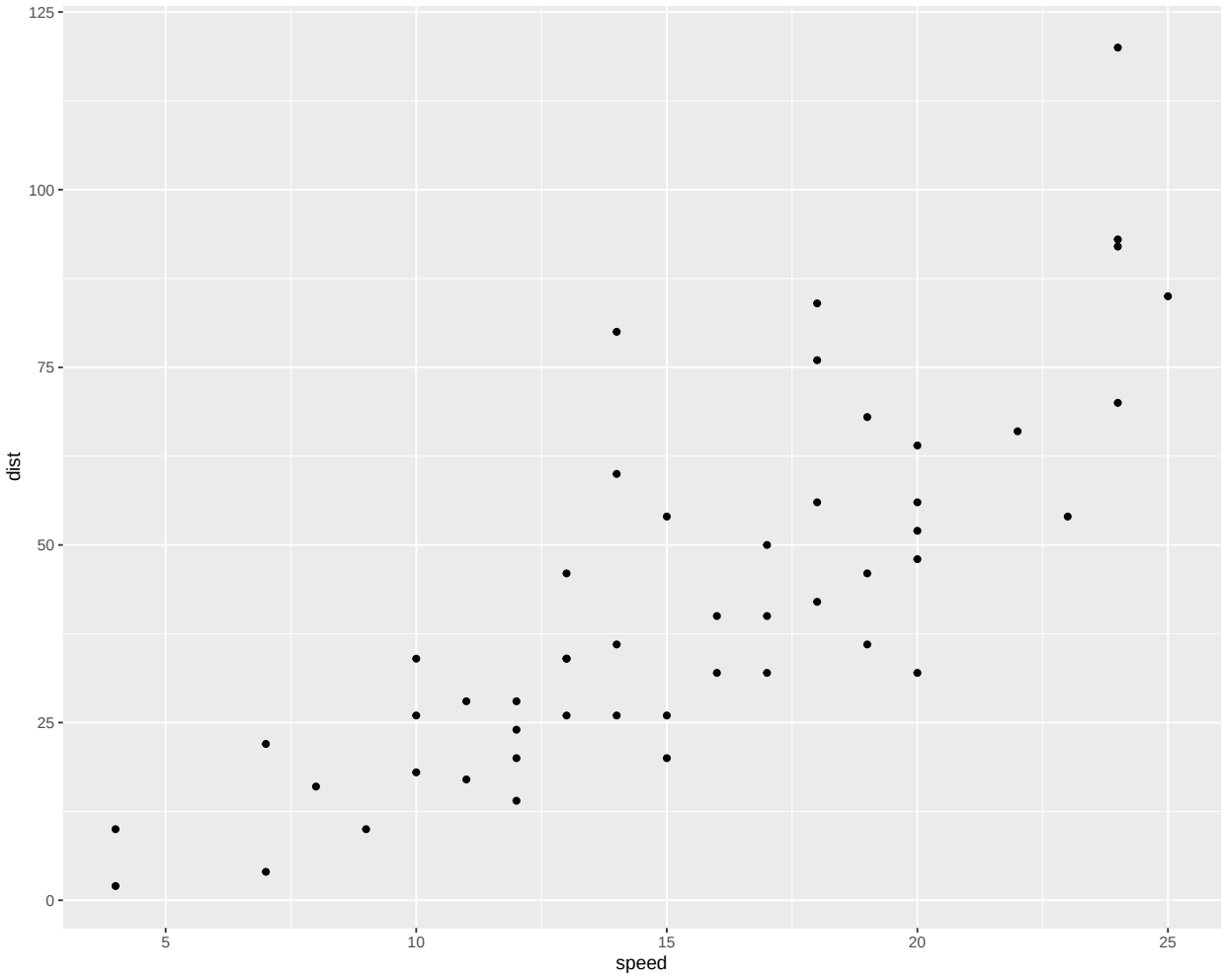


Here it is with some modifications:

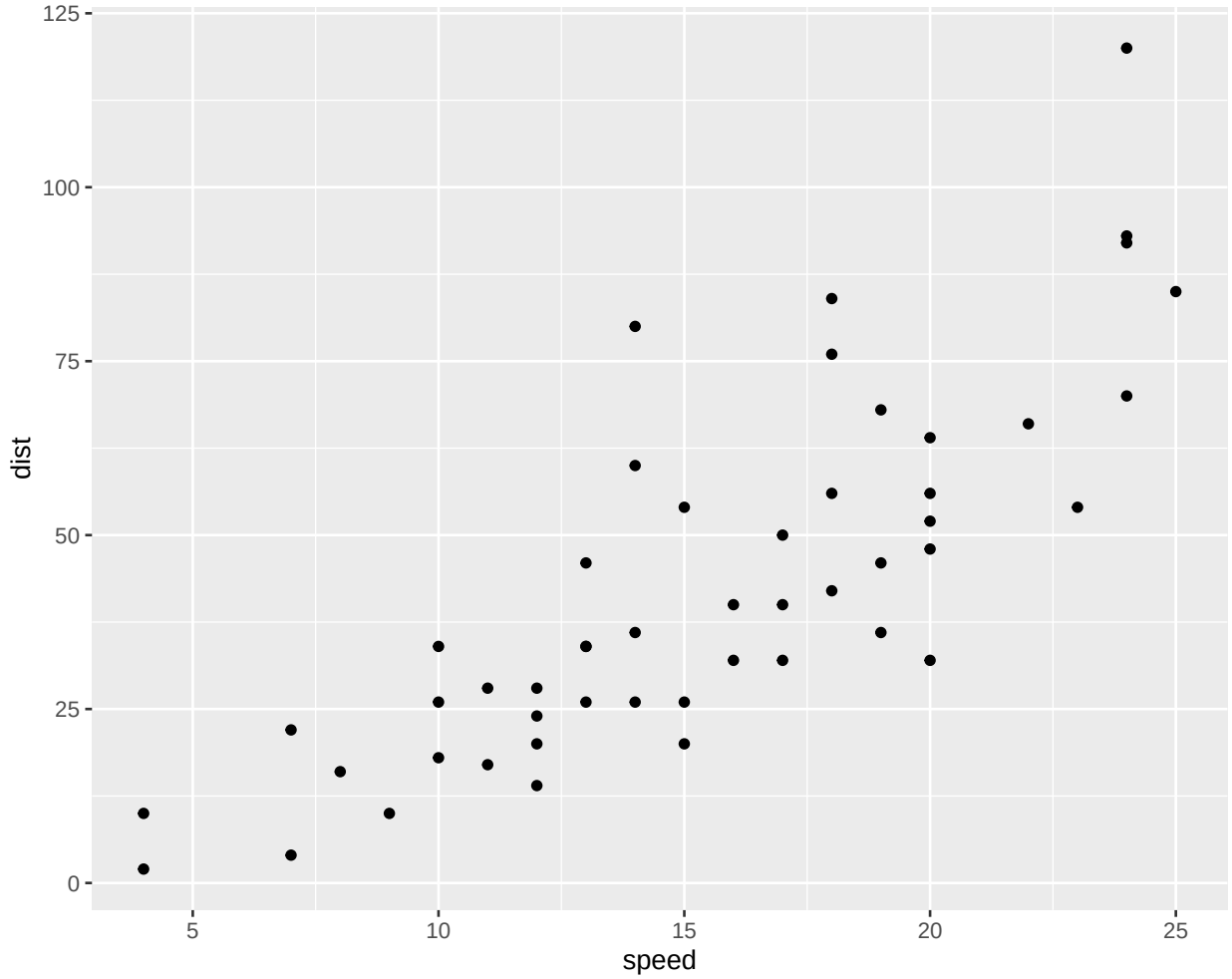
```
#I am forcing the code to display so you can see it.
# fig.asp=.8, figure.width=3
carplot
```



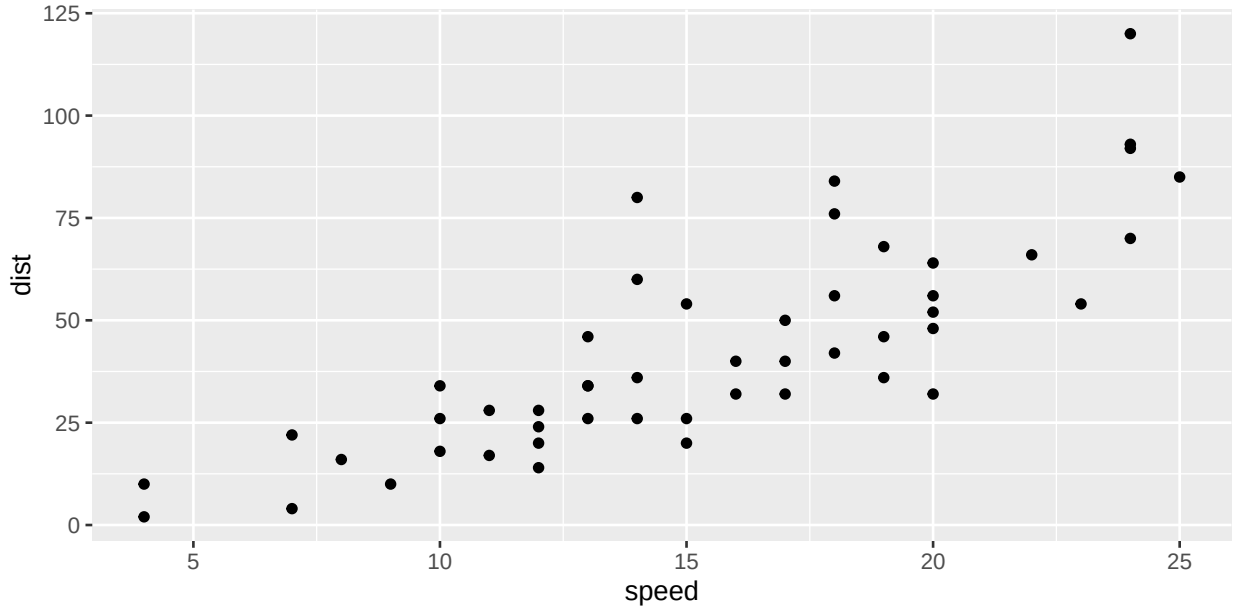

```
#I am forcing the code to display so you can see it.
# fig.asp=.8, figure.width=10
carplot
```




```
#I am forcing the code to display so you can see it.
# fig.asp=.8, figure.width=7
carplot
```




```
#I am forcing the code to display so you can see it.
# fig.asp=.5, figure.width=7
carplot
```



You will need to play around with the exact proportions you need to look best.

Remember: this should look like a report that you would hand to a boss/supervisor. Don't include unnecessary code and make it look professional.

If you need help figuring out headers or something else, you can reference the guides on the course site Link 1 and Link 2 or you can always shoot me an email.