

My 4th Test File

JDW

R Markdown

1. How to emebed image into R Markdnw

This is an example of embedding images in your local folder into R Markdown. For example, I have a illustration graph of the links between packages ggplot2, gtable, grid, egg and gridExtra under the folder Mod7. This plot approach only works for HTML. It does not work for a pdf or LaTeX approach which uses LaTeX for for figure referencing. However, I've now fixed that.

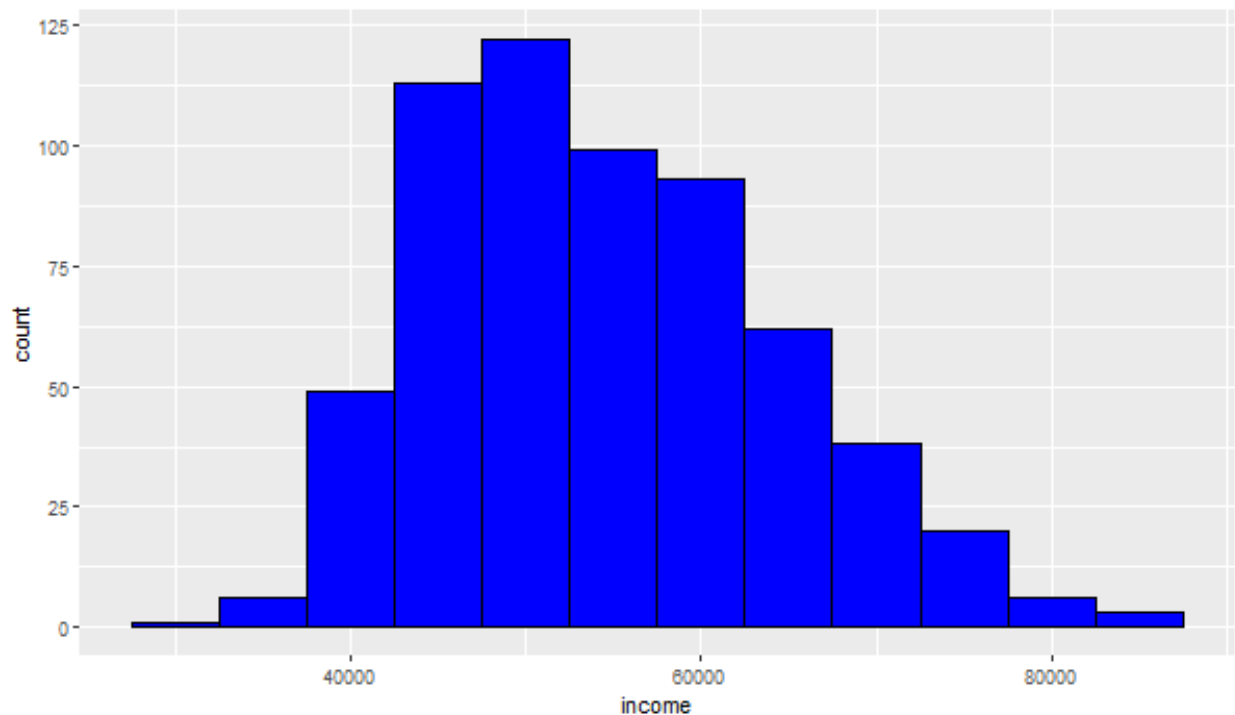


Figure 1: This is my own caption

1.3 Another Option

This is another way to insert the image and set the position for the image. However, in this approach there is no way to keep the figure with the text. I've sort of fixed that.

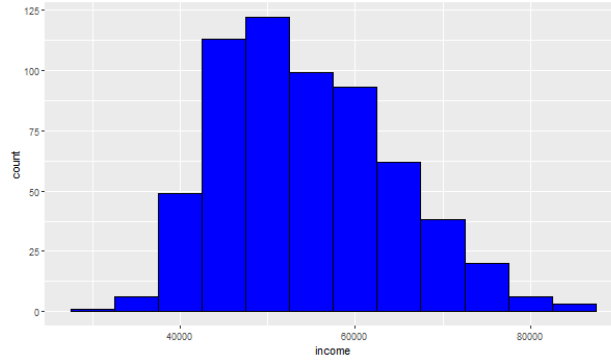


Figure 2: Resized Schematic illustration of my own file.

1.6 One More Option

This is still another way to insert the image and set the position for the image. Using LaTeX, it keeps the figure with the text.



Figure 3: Another Schematic of my own AI file.

2. Create a high quality figure in R Markdown

This is an example of plotting graphs by setting the plotting area and resolution. For example, I create a histogram below and set the width, height and resolution in the Chunk options. You can also define the figure size in YAML header and/or define the figure size as global chunk option. This is my own text.

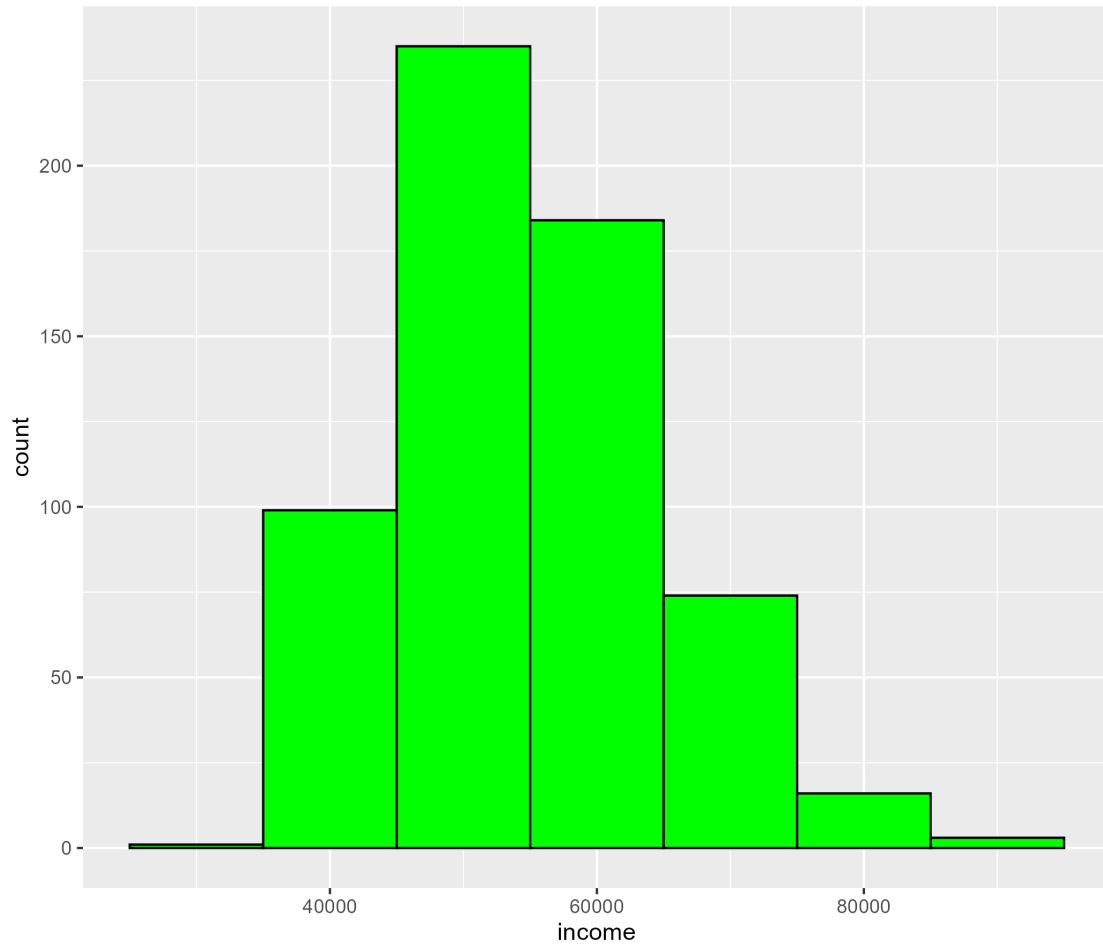


Figure 4: A histogram of incomes by state

3. Refer to the figure by indexing the figure.

In Figure 1, we see that the distribution of incomes is close to a normal distribution. In Figure 2, we see the illustration graph. There is no correct labeling of Figure 1, so it cannot be found. That is now corrected. Figure 3 can also be found.

4. Create tables using the kable function from the knitr package.

kable takes a data.frame as input, and outputs the table into a markdown table, which will get rendered into the appropriate output format.

For example, let's say we wanted to share the first 6 rows of our mtcars data.

This gives us the following output:

Table 1: A Knitr’s kable to show the first six rows of ‘mtcars’

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.62	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.88	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.21	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.46	20.22	1	0	3	1

5. Refer to the tables

For example, let’s say we wanted to share the first 10 rows of our mtcars data.

This gives us the following output:

Table 2: A Knitr’s kable to show the first ten rows of ‘mtcars’

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.62	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.88	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.32	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.21	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.44	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.46	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.57	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.19	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.15	22.90	1	0	4	2
Merc 280	19.2	6	167.6	123	3.92	3.44	18.30	1	0	4	4

In Table ??, we see the first **10** rows of the dataset “mtcars”.

Let’s try this again:

Table 3: A Knitr’s kable to show the first ten rows of ‘mtcars’

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.62	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.88	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.32	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.21	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.44	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.46	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.57	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.19	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.15	22.90	1	0	4	2
Merc 280	19.2	6	167.6	123	3.92	3.44	18.30	1	0	4	4

Once again in Table 3, we see the first **10** rows of the dataset “mtcars”.

Try something new

Let's try 'indexing' a table.

Table 4: A table to show the first 6 rows of 'mtcars' where mpg > 20

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.62	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.88	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.32	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.21	19.44	1	0	3	1
Merc 240D	24.4	4	146.7	62	3.69	3.19	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.15	22.90	1	0	4	2

In Table 4, we see the cars with greater than 20 mpg.