Chapter 1

Introduction

The file documents the knitLatex package. The purpose of this package is to provide LaTeX helpers designed to work with the knitr package. The package provides functions. Three of which, xTab, sTab, and lTab create table, longtable, and supertabular environments in LaTeX respectively. The fourth function knitr_sethooks serves two purposes. First, it fixes a well-known bug in knitr which occurs when using custom hooks in a results='asis' environment. Secondly, knitr_sethooks provides a custom command called 'com'. When "com=TRUE" is set in a chunk, the resulting chunk is turned into a LaTeX command which can be referenced by the chuck label. For example, the chunk "⟨⟨mychuck⟩⟩" can be referenced with \mychuck anywhere is the documentand the resultant LaTeX will be the same as what normally would have appeared in the spot of the chunk.

Chapter 2

longtable with com

This chapter demonstrates a longtable environment create with lTab. In this example, we created a latex command called \mylongtable in the preample of the document by setting 'com = TRUE' on the chunk. Because we set the label option as 'tab:mylongtable' we can type the following:

```
observe table \ref{tab:mylongtable} on page \pageref{tab:mylongtable}.
```
and produce this:
observe table 2.1 on page 4.

Table 2.1: My Long Table

mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4
17.8	6	167.6	123	3.92	3.44	18.9	1	0	4	4
16.4	8	275.8	180	3.07	4.07	17.4	0	0	3	3
17.3	8	275.8	180	3.07	3.73	17.6	0	0	3	3
15.2	8	275.8	180	3.07	3.78	18	0	0	3	3
10.4	8	472	205	2.93	5.25	17.98	0	0	3	4
10.4	8	460	215	3	5.424	17.82	0	0	3	4
14.7	8	440	230	3.23	5.345	17.42	0	0	3	4
32.4	4	78.7	66	4.08	2.2	19.47	1	1	4	1

Table 2.1: My Long Table

mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
33.9	4	71.1	65	4.22	1.835	19.9	1	1	4	1
21.5	4	120.1	97	3.7	2.465	20.01	1	0	3	1
15.5	8	318	150	2.76	3.52	16.87	0	0	3	2
15.2	8	304	150	3.15	3.435	17.3	0	0	3	2
13.3	8	350	245	3.73	3.84	15.41	0	0	3	4
19.2	8	400	175	3.08	3.845	17.05	0	0	3	2
27.3	4	79	66	4.08	1.935	18.9	1	1	4	1
26	4	120.3	91	4.43	2.14	16.7	0	1	5	2
30.4	4	95.1	113	3.77	1.513	16.9	1	1	5	2
15.8	8	351	264	4.22	3.17	14.5	0	1	5	4
19.7	6	145	175	3.62	2.77	15.5	0	1	5	6
15	8	301	335	3.54	3.57	14.6	0	1	5	8
21.4	4	121	109	4.11	2.78	18.6	1	1	4	2
21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4
17.8	6	167.6	123	3.92	3.44	18.9	1	0	4	4
16.4	8	275.8	180	3.07	4.07	17.4	0	0	3	3
17.3	8	275.8	180	3.07	3.73	17.6	0	0	3	3
15.2	8	275.8	180	3.07	3.78	18	0	0	3	3
10.4	8	472	205	2.93	5.25	17.98	0	0	3	4
10.4	8	460	215	3	5.424	17.82	0	0	3	4
14.7	8	440	230	3.23	5.345	17.42	0	0	3	4
32.4	4	78.7	66	4.08	2.2	19.47	1	1	4	1
30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
33.9	4	71.1	65	4.22	1.835	19.9	1	1	4	1
21.5	4	120.1	97	3.7	2.465	20.01	1	0	3	1
15.5	8	318	150	2.76	3.52	16.87	0	0	3	2
15.2	8	304	150	3.15	3.435	17.3	0	0	3	2
13.3	8	350	245	3.73	3.84	15.41	0	0	3	4
19.2	8	400	175	3.08	3.845	17.05	0	0	3	2
27.3	4	79	66	4.08	1.935	18.9	1	1	4	1
26	4	120.3	91	4.43	2.14	16.7	0	1	5	2
30.4	4	95.1	113	3.77	1.513	16.9	1	1	5	2
15.8	8	351	264	4.22	3.17	14.5	0	1	5	4

Table 2.1: My Long Table

mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
19.7	6	145	175	3.62	2.77	15.5	0	1	5	6
15	8	301	335	3.54	3.57	14.6	0	1	5	8
21.4	4	121	109	4.11	2.78	18.6	1	1	4	2
21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4
17.8	6	167.6	123	3.92	3.44	18.9	1	0	4	4
16.4	8	275.8	180	3.07	4.07	17.4	0	0	3	3
17.3	8	275.8	180	3.07	3.73	17.6	0	0	3	3
15.2	8	275.8	180	3.07	3.78	18	0	0	3	3
10.4	8	472	205	2.93	5.25	17.98	0	0	3	4
10.4	8	460	215	3	5.424	17.82	0	0	3	4
14.7	8	440	230	3.23	5.345	17.42	0	0	3	4
32.4	4	78.7	66	4.08	2.2	19.47	1	1	4	1
30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
33.9	4	71.1	65	4.22	1.835	19.9	1	1	4	1
21.5	4	120.1	97	3.7	2.465	20.01	1	0	3	1
15.5	8	318	150	2.76	3.52	16.87	0	0	3	2
15.2	8	304	150	3.15	3.435	17.3	0	0	3	2
13.3	8	350	245	3.73	3.84	15.41	0	0	3	4
19.2	8	400	175	3.08	3.845	17.05	0	0	3	2
27.3	4	79	66	4.08	1.935	18.9	1	1	4	1
26	4	120.3	91	4.43	2.14	16.7	0	1	5	2
30.4	4	95.1	113	3.77	1.513	16.9	1	1	5	2
15.8	8	351	264	4.22	3.17	14.5	0	1	5	4
19.7	6	145	175	3.62	2.77	15.5	0	1	5	6
15	8	301	335	3.54	3.57	14.6	0	1	5	8
21.4	4	121	109	4.11	2.78	18.6	1	1	4	2

Chapter 3

supertabular with com

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Table 3.1: My Supertabular

mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4
17.8	6	167.6	123	3.92	3.44	18.9	1	0	4	4
16.4	8	275.8	180	3.07	4.07	17.4	0	0	3	3
17.3	8	275.8	180	3.07	3.73	17.6	0	0	3	3
15.2	8	275.8	180	3.07	3.78	18	0	0	3	3
10.4	8	472	205	2.93	5.25	17.98	0	0	3	4
10.4	8	460	215	3	5.424	17.82	0	0	3	4

mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
14.7	8	440	230	3.23	5.345	17.42	0	0	3	4
32.4	4	78.7	66	4.08	2.2	19.47	1	1	4	1
30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
33.9	4	71.1	65	4.22	1.835	19.9	1	1	4	1
21.5	4	120.1	97	3.7	2.465	20.01	1	0	3	1
15.5	8	318	150	2.76	3.52	16.87	0	0	3	2
15.2	8	304	150	3.15	3.435	17.3	0	0	3	2
13.3	8	350	245	3.73	3.84	15.41	0	0	3	4
19.2	8	400	175	3.08	3.845	17.05	0	0	3	2
27.3	4	79	66	4.08	1.935	18.9	1	1	4	1
26	4	120.3	91	4.43	2.14	16.7	0	1	5	2
30.4	4	95.1	113	3.77	1.513	16.9	1	1	5	2
15.8	8	351	264	4.22	3.17	14.5	0	1	5	4
19.7	6	145	175	3.62	2.77	15.5	0	1	5	6
15	8	301	335	3.54	3.57	14.6	0	1	5	8
21.4	4	121	109	4.11	2.78	18.6	1	1	4	2
21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4
17.8	6	167.6	123	3.92	3.44	18.9	1	0	4	4
16.4	8	275.8	180	3.07	4.07	17.4	0	0	3	3
17.3	8	275.8	180	3.07	3.73	17.6	0	0	3	3
15.2	8	275.8	180	3.07	3.78	18	0	0	3	3
10.4	8	472	205	2.93	5.25	17.98	0	0	3	4
10.4	8	460	215	3	5.424	17.82	0	0	3	4
14.7	8	440	230	3.23	5.345	17.42	0	0	3	4
32.4	4	78.7	66	4.08	2.2	19.47	1	1	4	1
30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
33.9	4	71.1	65	4.22	1.835	19.9	1	1	4	1
21.5	4	120.1	97	3.7	2.465	20.01	1	0	3	1
15.5	8	318	150	2.76	3.52	16.87	0	0	3	2
15.2	8	304	150	3.15	3.435	17.3	0	0	3	2
13.3	8	350	245	3.73	3.84	15.41	0	0	3	4
19.2	8	400	175	3.08	3.845	17.05	0	0	3	2

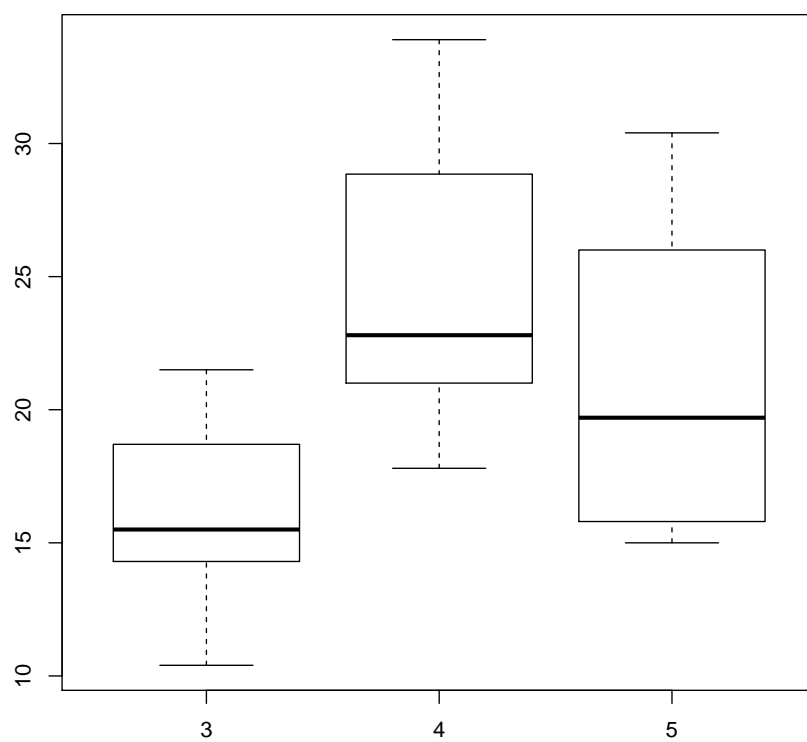| mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
27.3	4	79	66	4.08	1.935	18.9	1	1	4	1
26	4	120.3	91	4.43	2.14	16.7	0	1	5	2
30.4	4	95.1	113	3.77	1.513	16.9	1	1	5	2
15.8	8	351	264	4.22	3.17	14.5	0	1	5	4
19.7	6	145	175	3.62	2.77	15.5	0	1	5	6
15	8	301	335	3.54	3.57	14.6	0	1	5	8
21.4	4	121	109	4.11	2.78	18.6	1	1	4	2
21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4
17.8	6	167.6	123	3.92	3.44	18.9	1	0	4	4
16.4	8	275.8	180	3.07	4.07	17.4	0	0	3	3
17.3	8	275.8	180	3.07	3.73	17.6	0	0	3	3
15.2	8	275.8	180	3.07	3.78	18	0	0	3	3
10.4	8	472	205	2.93	5.25	17.98	0	0	3	4
10.4	8	460	215	3	5.424	17.82	0	0	3	4
14.7	8	440	230	3.23	5.345	17.42	0	0	3	4
32.4	4	78.7	66	4.08	2.2	19.47	1	1	4	1
30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
33.9	4	71.1	65	4.22	1.835	19.9	1	1	4	1
21.5	4	120.1	97	3.7	2.465	20.01	1	0	3	1
15.5	8	318	150	2.76	3.52	16.87	0	0	3	2
15.2	8	304	150	3.15	3.435	17.3	0	0	3	2
13.3	8	350	245	3.73	3.84	15.41	0	0	3	4
19.2	8	400	175	3.08	3.845	17.05	0	0	3	2
27.3	4	79	66	4.08	1.935	18.9	1	1	4	1
26	4	120.3	91	4.43	2.14	16.7	0	1	5	2
30.4	4	95.1	113	3.77	1.513	16.9	1	1	5	2
15.8	8	351	264	4.22	3.17	14.5	0	1	5	4
19.7	6	145	175	3.62	2.77	15.5	0	1	5	6
15	8	301	335	3.54	3.57	14.6	0	1	5	8
21.4	4	121	109	4.11	2.78	18.6	1	1	4	2

Chapter 4

figure with com

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Figure 4.1: myfigure

Chapter 5

xTab without com

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```
xTab(mtcars, label='tab:mytable', caption.bottom='My Table')

## \begin{table}[ht]
## \begin{center}
## \begin{tabular}{rrrrrrrrrrr}
## \hline
## mpg & cyl & disp & hp & drat & wt & qsec & vs & am & gear & carb \\
## \hline
## 21 & 6 & 160 & 110 & 3.9 & 2.62 & 16.46 & 0 & 1 & 4 & 4 \\
## 21 & 6 & 160 & 110 & 3.9 & 2.875 & 17.02 & 0 & 1 & 4 & 4 \\
## 22.8 & 4 & 108 & 93 & 3.85 & 2.32 & 18.61 & 1 & 1 & 4 & 1 \\
## 21.4 & 6 & 258 & 110 & 3.08 & 3.215 & 19.44 & 1 & 0 & 3 & 1 \\
## 18.7 & 8 & 360 & 175 & 3.15 & 3.44 & 17.02 & 0 & 0 & 3 & 2 \\
## 18.1 & 6 & 225 & 105 & 2.76 & 3.46 & 20.22 & 1 & 0 & 3 & 1 \\
## 14.3 & 8 & 360 & 245 & 3.21 & 3.57 & 15.84 & 0 & 0 & 3 & 4 \\
## 24.4 & 4 & 146.7 & 62 & 3.69 & 3.19 & 20 & 1 & 0 & 4 & 2 \\
## 22.8 & 4 & 140.8 & 95 & 3.92 & 3.15 & 22.9 & 1 & 0 & 4 & 2 \\
## 19.2 & 6 & 167.6 & 123 & 3.92 & 3.44 & 18.3 & 1 & 0 & 4 & 4 \\
## 17.8 & 6 & 167.6 & 123 & 3.92 & 3.44 & 18.9 & 1 & 0 & 4 & 4 \\
## 16.4 & 8 & 275.8 & 180 & 3.07 & 4.07 & 17.4 & 0 & 0 & 3 & 3 \\
```

```
## 17.3 & 8 & 275.8 & 180 & 3.07 & 3.73 & 17.6 & 0 & 0 & 3 & 3 \\
## 15.2 & 8 & 275.8 & 180 & 3.07 & 3.78 & 18 & 0 & 0 & 3 & 3 \\
## 10.4 & 8 & 472 & 205 & 2.93 & 5.25 & 17.98 & 0 & 0 & 3 & 4 \\
## 10.4 & 8 & 460 & 215 & 3 & 5.424 & 17.82 & 0 & 0 & 3 & 4 \\
## 14.7 & 8 & 440 & 230 & 3.23 & 5.345 & 17.42 & 0 & 0 & 3 & 4 \\
## 32.4 & 4 & 78.7 & 66 & 4.08 & 2.2 & 19.47 & 1 & 1 & 4 & 1 \\
## 30.4 & 4 & 75.7 & 52 & 4.93 & 1.615 & 18.52 & 1 & 1 & 4 & 2 \\
## 33.9 & 4 & 71.1 & 65 & 4.22 & 1.835 & 19.9 & 1 & 1 & 4 & 1 \\
## 21.5 & 4 & 120.1 & 97 & 3.7 & 2.465 & 20.01 & 1 & 0 & 3 & 1 \\
## 15.5 & 8 & 318 & 150 & 2.76 & 3.52 & 16.87 & 0 & 0 & 3 & 2 \\
## 15.2 & 8 & 304 & 150 & 3.15 & 3.435 & 17.3 & 0 & 0 & 3 & 2 \\
## 13.3 & 8 & 350 & 245 & 3.73 & 3.84 & 15.41 & 0 & 0 & 3 & 4 \\
## 19.2 & 8 & 400 & 175 & 3.08 & 3.845 & 17.05 & 0 & 0 & 3 & 2 \\
## 27.3 & 4 & 79 & 66 & 4.08 & 1.935 & 18.9 & 1 & 1 & 4 & 1 \\
## 26 & 4 & 120.3 & 91 & 4.43 & 2.14 & 16.7 & 0 & 1 & 5 & 2 \\
## 30.4 & 4 & 95.1 & 113 & 3.77 & 1.513 & 16.9 & 1 & 1 & 5 & 2 \\
## 15.8 & 8 & 351 & 264 & 4.22 & 3.17 & 14.5 & 0 & 1 & 5 & 4 \\
## 19.7 & 6 & 145 & 175 & 3.62 & 2.77 & 15.5 & 0 & 1 & 5 & 6 \\
## 15 & 8 & 301 & 335 & 3.54 & 3.57 & 14.6 & 0 & 1 & 5 & 8 \\
## 21.4 & 4 & 121 & 109 & 4.11 & 2.78 & 18.6 & 1 & 1 & 4 & 2 \\
## \hline
## \end{tabular}
## \caption{My Table}
## \label{tab:mytable}
## \end{center}
## \end{table}
```

Chapter 6

figure without com

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.
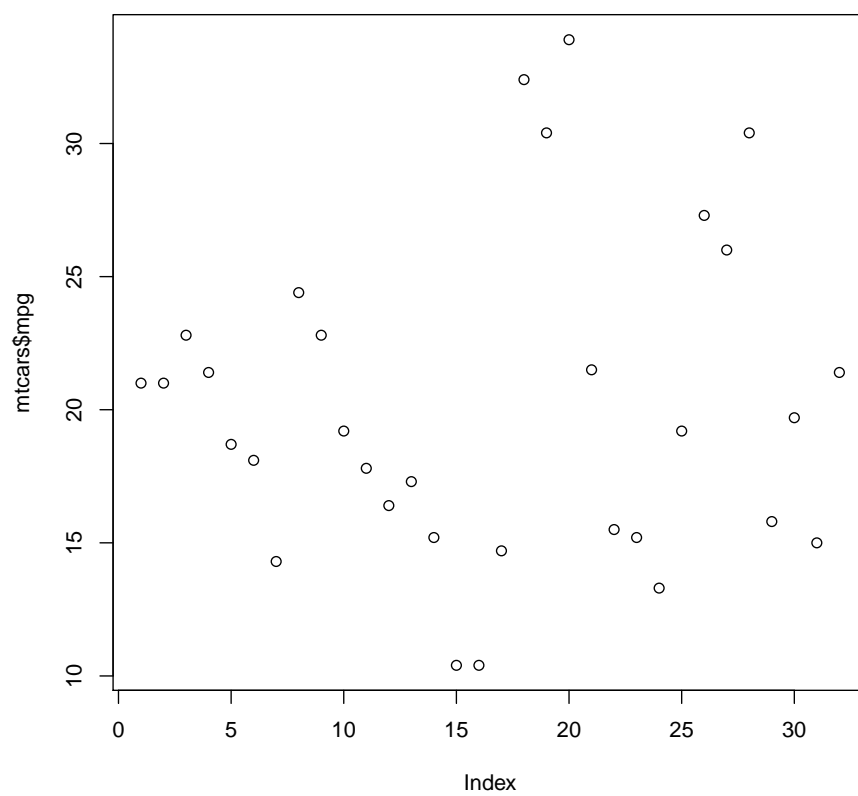
```r
plot(mtcars$mpg)
```

Figure 6.1: myotherfig