



**Subject Areas:**

subject 1, subject 2, subject 3

**Keywords:**

one, two, optional, optional, optional

**Author for correspondence:**

B. Security

e-mail: [bob@email.com](mailto:bob@email.com)

## Template for preparing your research report submission to Royal Society Open Science using RMarkdown

Alice Anonymous<sup>1,2</sup>, Bob Security<sup>2</sup>

<sup>1</sup>Some Institute of Technology, Department, Street,  
City, State, Zip

<sup>2</sup>Another University Department, Street, City, State, Zip

The abstract text goes here. The abstract text goes here.  
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### 1. Insert A head here

This demo file is intended to serve as a “starter file”  
for articles submitted to the [Royal Society Open Science](#)  
journal using RMarkdown.

Place `\EndFirstPage` at the point where the plain  
text on the first page stops. Warning: excess text will be  
hidden behind the copyright box. The example below  
contains line 1 to 19 in the code. Lines 14 to 17 are hidden  
behind the copyright box.

#### (a) Insert B head here

Subsection text here.

##### (i) Insert C head here

Subsubsection text here.

Line 1  
Line 2  
Line 3  
Line 4  
Line 5  
Line 6  
Line 7  
Line 8  
Line 9  
Line 10  
Line 11  
Line 12  
Line 13

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source are credited.

Line 18  
Line 19

## 2. Lists

- one
- two
- three
- fruits
  - apples
    - \* macintosh
    - \* red delicious
  - pears
  - peaches
- vegetables
  - broccoli
  - chard

### (a) Citations

Blabla [1] blabla. Blabla [2] blabla. Blabla [1,3] blabla. Blabla [2,4–6] blabla.

#### (i) Headling level 3

Subsubsection text here.

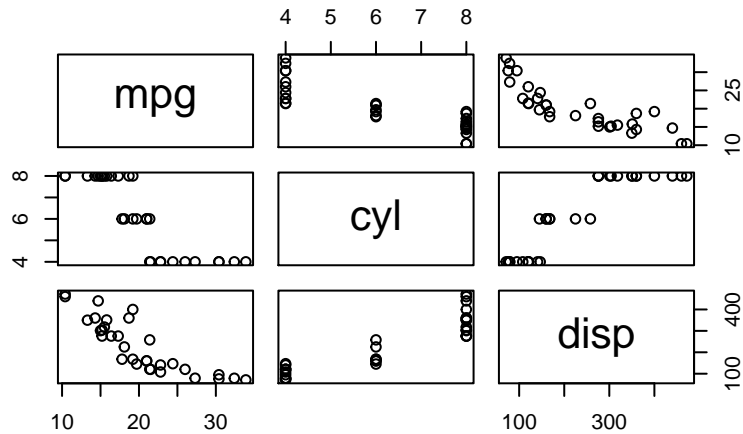
## 3. R code

R code can be added as usual. Note that syntax highlighting is not available. Fig. 1 is an example.

```
#23456789012345678901234567890123456789012345678901234567890123456789012345
#          10          20          30          40          50          60          70
summary(lm(mpg ~ disp, data = mtcars))

##
## Call:
## lm(formula = mpg ~ disp, data = mtcars)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -4.8922 -2.2022 -0.9631  1.6272  7.2305
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  29.599855   1.229720  24.070  < 2e-16 ***
## disp        -0.041215   0.004712  -8.747  9.38e-10 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 3.251 on 30 degrees of freedom
## Multiple R-squared:  0.7183, Adjusted R-squared:  0.709
## F-statistic: 76.51 on 1 and 30 DF, p-value: 9.38e-10

##          mpg          cyl          disp          hp
##   Min.       :10.40   Min.       :4.000   Min.       : 71.1   Min.       : 52.0
```



**Figure 1.** The caption

```
## 1st Qu.:15.43 1st Qu.:4.000 1st Qu.:120.8 1st Qu.: 96.5
## Median :19.20 Median :6.000 Median :196.3 Median :123.0
## Mean :20.09 Mean :6.188 Mean :230.7 Mean :146.7
## 3rd Qu.:22.80 3rd Qu.:8.000 3rd Qu.:326.0 3rd Qu.:180.0
## Max. :33.90 Max. :8.000 Max. :472.0 Max. :335.0
## drat wt qsec vs
## Min. :2.760 Min. :1.513 Min. :14.50 Min. :0.0000
## 1st Qu.:3.080 1st Qu.:2.581 1st Qu.:16.89 1st Qu.:0.0000
## Median :3.695 Median :3.325 Median :17.71 Median :0.0000
## Mean :3.597 Mean :3.217 Mean :17.85 Mean :0.4375
## 3rd Qu.:3.920 3rd Qu.:3.610 3rd Qu.:18.90 3rd Qu.:1.0000
## Max. :4.930 Max. :5.424 Max. :22.90 Max. :1.0000
## am gear carb
## Min. :0.0000 Min. :3.000 Min. :1.000
## 1st Qu.:0.0000 1st Qu.:3.000 1st Qu.:2.000
## Median :0.0000 Median :4.000 Median :2.000
## Mean :0.4062 Mean :3.688 Mean :2.812
## 3rd Qu.:1.0000 3rd Qu.:4.000 3rd Qu.:4.000
## Max. :1.0000 Max. :5.000 Max. :8.000
```

**Ethics.** Please provide details on the ethics.

**Data Accessibility.** Please provide details on the data availability.

**Authors' Contributions.** Please provide details of author contributions here.

**Competing Interests.** Please declare any conflict of interest here.

**Funding.** Please provide details on funding

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**Acknowledgements.** Please include your acknowledgments here, set in a single paragraph. Please do not include any acknowledgments in the Supporting Information, or anywhere else in the manuscript.

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