Good afternoon!

You can type in **bold** or *italic* 

You can put an entire sentence in bold or italic

If you want to type a Header

## First header

or

### Insert a sub-section

Sub sub-section

## Insert

### Your first link

This is the text you will see

or using bold

You can also use reference links to move to  $\boldsymbol{my}$  website or to Universidade do Minho

# How to use images and define size

First using a relative size



or a fixed size



Figure 1: Universidade do Minho

You can also use an image from a link:



Figure 2: RStudio's logo

When writing your document you can quote using carat (>). This is called a block quote. The following text was generated using Lorem Ipsum.

Tuas vocat velantibus rogos, quem tamen foedere laetabere bipennifer nulla se camini. In forsitan, in verti iam submissaeque faciam adversum et quae. Tu ille postquam interdum, est sed Britannos, dedecus solae pectore at modo in adeste vitta tantummodo ingrato. Caedis numina, tonitruque iugum speciem corpore, leves hunc Zancle auferat umero foribusque cursus negate inhaerentem Styga Hebre meosque?

Spes speciosoque dixit ferinae agros simulatque domum alimentaque pabula claro; a costis, a nec captus Aquilone. Pharonque donec, modo suo vires arcanis, quem illis Vesta quae dedit. Pervenerat placat lenta; sine finxit, tantum pater, tamen fila sedibus, sonent. Nempe caedit quas fundunt optima sua vultusque remolliat et habet tendebat Hesperidas: corniger. *Digna* spatium effugere magne, a pectora hospes volant frena crinis resonant protinus; morte Hippomenen.

Another markdown element you may want to use are lists.

## Course Outline

as an ordered list

- 1. Markdown and Pandoc
- 2. Create a markdown document and run code
- 3. Develop a report
- 4. Publish the report

or just as bullets

- Markdown and Pandoc
- Create a markdown document and run code

where you may need additional depth. Use tabulations

- Markdown and Pandoc
  - Create a markdown document and run code
- Develop a report
  - Publish the report

# LITERATE PROGRAMMING IN R MARK-DOWN

- Date: 27 & 29 October | 17h00-20h00
- Delivered by: Miguel Portela, University of Minho

Literate programming refers to melding a descriptive narrative and computer code into a single document, from which both human-friendly documentation and computer readable files can be created. Your work should be transparent, easy to update, easy to maintain, and easy to replicate. Literate programming saves time and effort, so we can dedicate more time doing research. Literate programming is also useful for teaching.

#### Course Outline

- 1. Markdown and Pandoc
- 2. Create a markdown document and run code
- 3. Develop a report
- 4. Publish the report

#### References

- Xie, Y., Allaire, J.J. and Grolemund, G., 2018. R markdown: The definitive guide. CRC Press. (https://bookdown.org/yihui/rmarkdown/), "Course 5: Web-based tools for data analysis: JupyterLab environment and workflow optimization"
- The Jupyter Notebook: https://jupyter-notebook.readthedocs.io/
- Project Jupyter

# Paragraphs & Tables

### Using a double space at the end of the sentence

Phaethon Delphos mea gravis excipiunt stabat: quem aqua taceam Phoebo, vir aratri, Ulixes haec perque.

Nactus dempserat sui regnat enim, acta stet Areos praesagaque in iacent? Fuerant crescentem vinci clamat.

#### Add footnotes

This is a footnote.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Ad remorum vestem pater victor Megareus lacrimas adsiduae regina sequenti Invidiae, ille tum aliquid. Locus uno quid curruque dixit, me regis, deum **iamque**, et ripas validum ubi! Auras amores quam feritatis apros demite ademptas est **tanto**!

#### This is a table

Table 1: Sample table

Tables	Are	Cool
Var 1 is	Left-Aligned	\$1271
Var 2 is	Centered	\$13
Var 3 is	Right-Aligned	\$7

## The YAML concept

You can add information to your document, like title, author, etc., using YAML.

YAML: YAML Ain't Markup Language

What It Is: YAML is a human friendly data serialization standard for all programming languages.

The following lines are comments so *pandoc* will not compile them. You can use standard HTML tags to comments out sections of your code. To see their purpose add them to the beginning of the text.

#### Citations

Lorem markdownum medulla: Est hanc instrumenta sibi; premit opem Dianae, *ubi India* vocesque prodamne, quamvis? Et esse. Quod molire auxiliumque caelumque tertia hospes, fecerat sermonibus prensamque mortale summa, iubeatis coercet iugulum, **et**. For futher discussion (see ???).

# **Equations**

You can write inline equations as  $y_i = \alpha_0 + \tau x_i + \psi_i$  or numbered equations,

$$y_{it} = \beta_0 + \beta_1 x_{it} + \eta_i + \varepsilon it \tag{1}$$

## Final remarks

For additional insights see (???).

## References