Title of Document

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Table of Contents

## 1 Introduction

Let me first talk about the structure of the project, then I will talk about writing about it in the **Quarto**. The project should include following sections.

* Introduction
* Literature Review
* Data and Methodology
	+ Data
	+ Methodology
* Results Analysis
* Conclusion
* References

I am sharing sample papers to understand, what should go in these sections.

## 2 Writing in Quarto

Now let me introduce different procedures needed to complete the project in **Qaurto**.

* First **YAML**

In **YAML**, we include about the document information and formatting structure of the document. Here I have included bare minimum **YAML**, which will be sufficient to complete the project in a structured format.

* Inserting a link

To include a link, you have two options. One where you want to display the full link then write like this <https://www.google.co.in/>. Remember the link should be in between the <> if you want to show a text instead of a full link and hide the link behind the text. Then write like this. To go to Google, click on the word [Google](https://www.google.co.in/).

* Different formats of texts

To write a **bold text**, you have to the texts in between the symbols \*\* \*\*, and to write ***italic texts***, you have to write the texts in between the symbols \*\*\* \*\*\*.

* Bullet items and numbered items.

First, to create bullet items you can use the symbol \* or -. You must give space after the symbol and also have space between one bullet item to another. To create a sub-bullet, you have to shift the next bullet item towards the right. For example, see this list.

* item1
* item2
	+ sub-item1
	+ sub-item2
* Numbered items
1. item1
2. item2
	1. sub-item1
	2. sub-item2

You may use the tab to create a sub-bullet(Use two tab spaces to create sub-numbered items).

## 3 Writing equations

There are two types of equations you may need to insert in the document. One is known as an **inline equation,** such as $y=a+b$. The second is known as **Display equations,** such as

$$y=α+βx$$

|  |
| --- |
|  Note |
| To write a display equation, use $$ sign at the beginning of the equation and at the end of the equation, and there should not be any **space** after the $$ sign and before the $$ sign. |

To write a numbered equation, use a tag after the $$ sign at the end of the equation like this.

$$y=α+βx  \left(1\right)$$

|  |
| --- |
|  Note |
| The tag must be inside the curly bracket {} and start with #eq, and after - you can put any identification. For example, I have used the word **one**. |

In quarto, we use LaTeX language to write mathematical symbols and equations. To see the full list of LaTeX code, click [HERE](https://www.cmor-faculty.rice.edu/~heinken/latex/symbols.pdf).

## 4 Changing the colour of the text.

You change the colour of the text by using the command {style="color: red"}. To make the colour of the text blue, I have used {style="color: blue"}. Similarly, to use the color of the text red, I have used {style="color: red"}. The specific text of which you want to change the colour must be within [] and followed by the style.

## 5 Inserting code

To insert the code chunk (group of codes), you have to use the **back quote (`)**, just below the **twiddle/tilde (~)** symbol. To insert a code chunk, in the beginning, put three \***back quote(```)** symbols and at the end also put three **back quote(```)** symbols.

### 5.1 Some examples

Here we will import the data for further analysis.

|  |
| --- |
|  Note |
| Another and easiest way to insert code chunk is to switch to the visual editor and from the insert tab click on the **executable cell** or use shortcut keys Ctrl+Alt+I. |

In the above code chunk use echo: false will make sure that code is not printed in the document. However, eval: true makes this code executable that is data will be imported and stored in dataframe named data.

Lets examine the data by using code head().

 Year HI SID
1 1990 0.207 0.793
2 1991 0.231 0.769
3 1992 0.220 0.780

The results will be printed in the document.

Now lets make line graph of these variables.

|  |
| --- |
| Figure 1: A Figure |

Here in the above code chunk fig-width and fig-height is for the width and height of the figure respectively. fig-align is for the alignment of figure, which is in center of the document width. Similarly fig-caption and fig-cap-location is respectively for the caption of the figure and position of caption. Here option label makes the figure cross-referenceable. Here we cross-reference the above figure like this, the [Figure 1](#fig-line-plot) shows overtime growth of HI.

|  |
| --- |
|  Note |
| First to lable the figure command must start with fig and then after - name the graph/plot. For example here name is line-plot. Then use @ followed by fig-line-plot to cross-reference the figure. |

Warning: package 'psych' was built under R version 4.4.1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 1: Descriptive Statistics

|  | vars | n | mean | sd | skew | kurtosis | se |
| --- | --- | --- | --- | --- | --- | --- | --- |
| HI | 1 | 31 | 0.213129 | 0.0067416 | 0.2145743 | 0.5424833 | 0.0012108 |
| SID | 2 | 31 | 0.786871 | 0.0067416 | -0.2145743 | 0.5424833 | 0.0012108 |

 |

Here kable is to make the table in the document. You can cross-reference the table as [Table 1](#tbl-des).

## 6 Final words

This is a sample, you can explore further for the other options. You may find the complete list of option [HERE](https://quarto.org/docs/reference/formats/docx.html).

|  |
| --- |
|  Note |
| Remaining formatting, you may do in the generated word file also. |