

# Simple Regression

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## Abstract

We analyzed the relationship between height and weight of some individuals from a galaxy far, far away.

## 1 Introduction

This is just a minimal example of a simple regression analysis in R. The goal is to practice creating a reproducible report using several tools such as Makefile, R, knitr, Rnw files, plots, etc.

## 2 Data

We curated a data set from the wookieepedia. Current descriptions in the website do not longer contain information about weight.

	name	height	weight
1	Anakin Skywalker	188	84
2	Padme Amidala	165	45
3	Luke Skywalker	172	77
4	Leia Skywalker	150	49
5	Obi-Wan Kenobi	182	77
6	Han Solo	180	80
7	R2-D2	96	32
8	C-3PO	167	75
9	Yoda	66	17
10	Chewbacca	228	112

There are 10 individuals, with an average height of 159.4 cms, and an average weight of 64.8 kgs. The summary statistics are displayed in the table below:

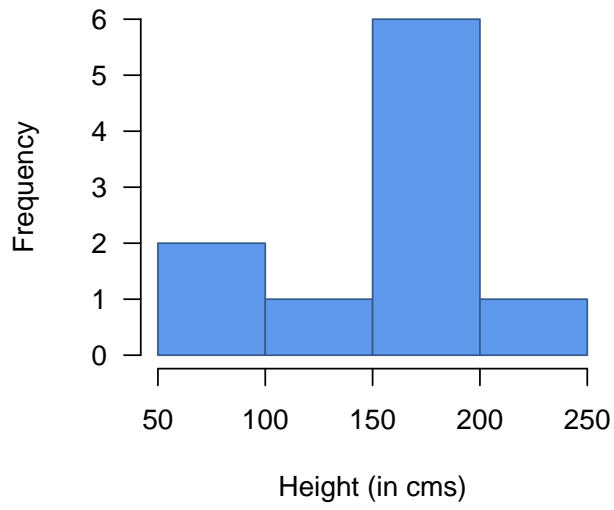
	height	weight
1	Min. : 66.0	Min. : 17.00
2	1st Qu.:153.8	1st Qu.: 46.00
3	Median :169.5	Median : 76.00
4	Mean :159.4	Mean : 64.80
5	3rd Qu.:181.5	3rd Qu.: 79.25
6	Max. :228.0	Max. :112.00

### 2.1 EDA

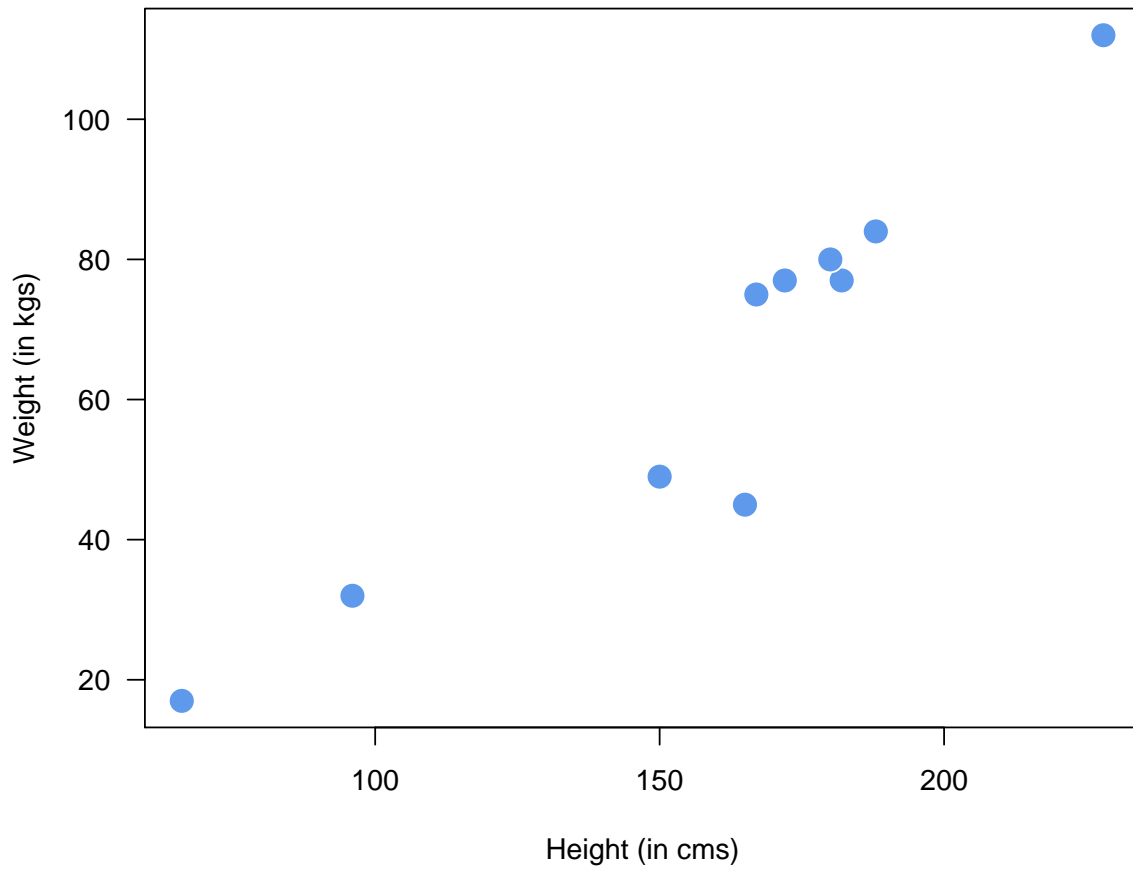
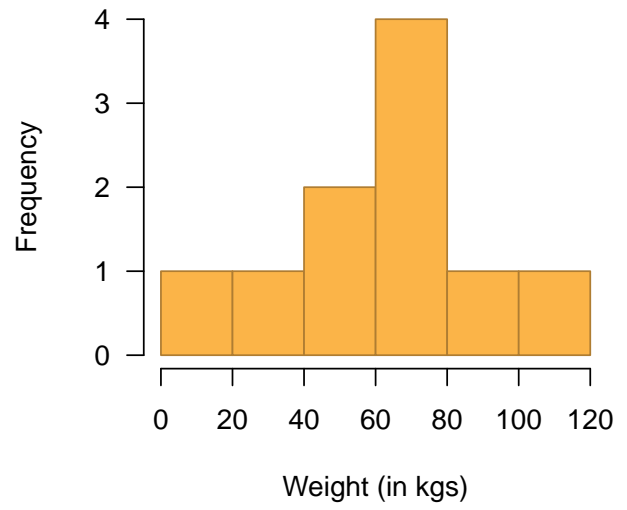
We looked at the distributions of height and weight. As suggested by [1], this relation is almost perfectly linear among human Jedis.

There is a strong linear relationship between height and weight. This is evidenced in the scatterplot, and calculation the correlation 0.9412865.

**Histogram of Height**



**Histogram of Weight**



### 3 Conclusions

Our analysis agrees with Yoda’s seminal article [2]. But more work needs to be carried out like collecting additional samples in future surveys. May the Force be with you.

### References

- [1] Grand Master Biel Ductavis. *How to Become a Jedi*. Coruscant: Jedi Temple Editions, 10966 BBY.
- [2] Yoda. “Do. Or do not. There is no try.” In: *Journal of the Jedi Order* 6 (June 1999), pp. 75–83.