Code Club Week 1 - Table Setting

Let’s set the data table!

Welcome everyone challenge number one in the Code Club Challenge! Instead of going straight to the analytical main course, let’s first get to grips with setting the (data) table so we can see things clearer.

```
### Load Tidyverse
library(tidyverse)

### Let's load in the data
main_data = as_tibble(datasets::'Titanic')
```

Main Course

The problem

We want to undestand the data a bit clearer and understand things like how many children are in the dataset, or how many people were in each Class. We can quickly use the table() function and get something similar to below. The only downside is that it’s a tad basic and not very nice to look at.

Var1	Freq
1st	8
2nd	8
3rd	8
Crew	8

Task 1

So your challange is to write a function that will:

1. Accept a tibble with column name as its input
2. Take this input and produce a count table (like the one above)
3. Make it look neater
4. Have the count column name be the column name rather than ‘Var1’

That way you end up with a function that will take an input similar to ‘titanic$class’ and output somthing like the following:

A table for Class

Class	Count
1st	8
2nd	8
3rd	8
Crew	8

The great part is that you now have a function that will consistently put out tables in the fomrat you like, regardless of which data you use!

Dessert

The problem

Rather than having to go through every variable in the dataset and create a seperate command to

Task 2

Summarise the whole dataset in one table using a function so that you end up with a table like below but for the Titanic dataset

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.440	17.02	0	0	3	2

Task 3

Summarise the whole dataset but produce a seperate table with correct names for each variable in the tibble