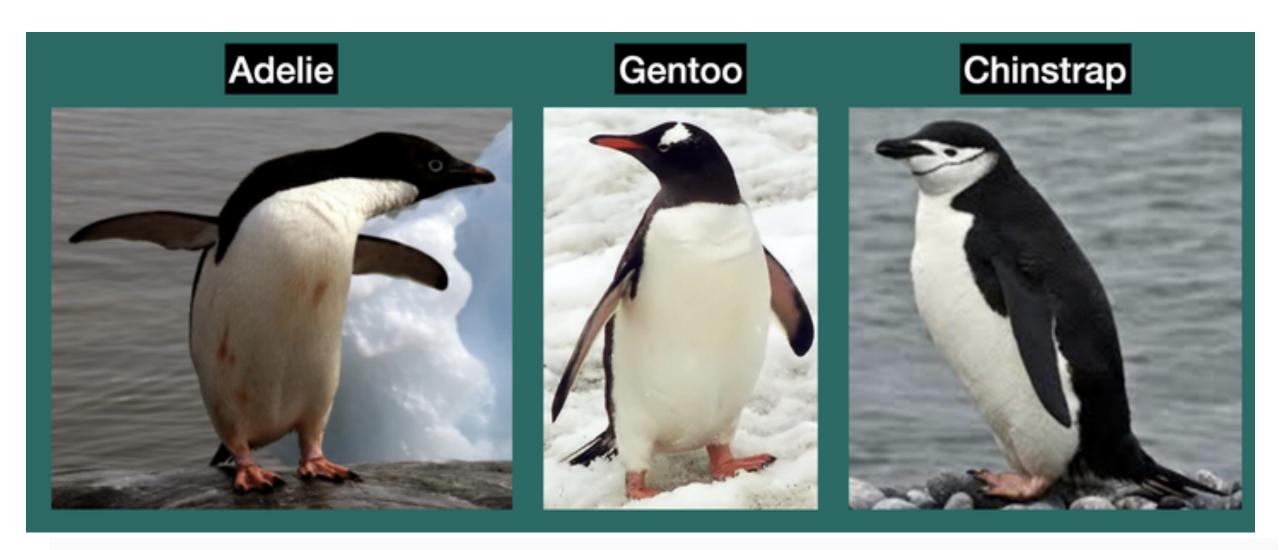


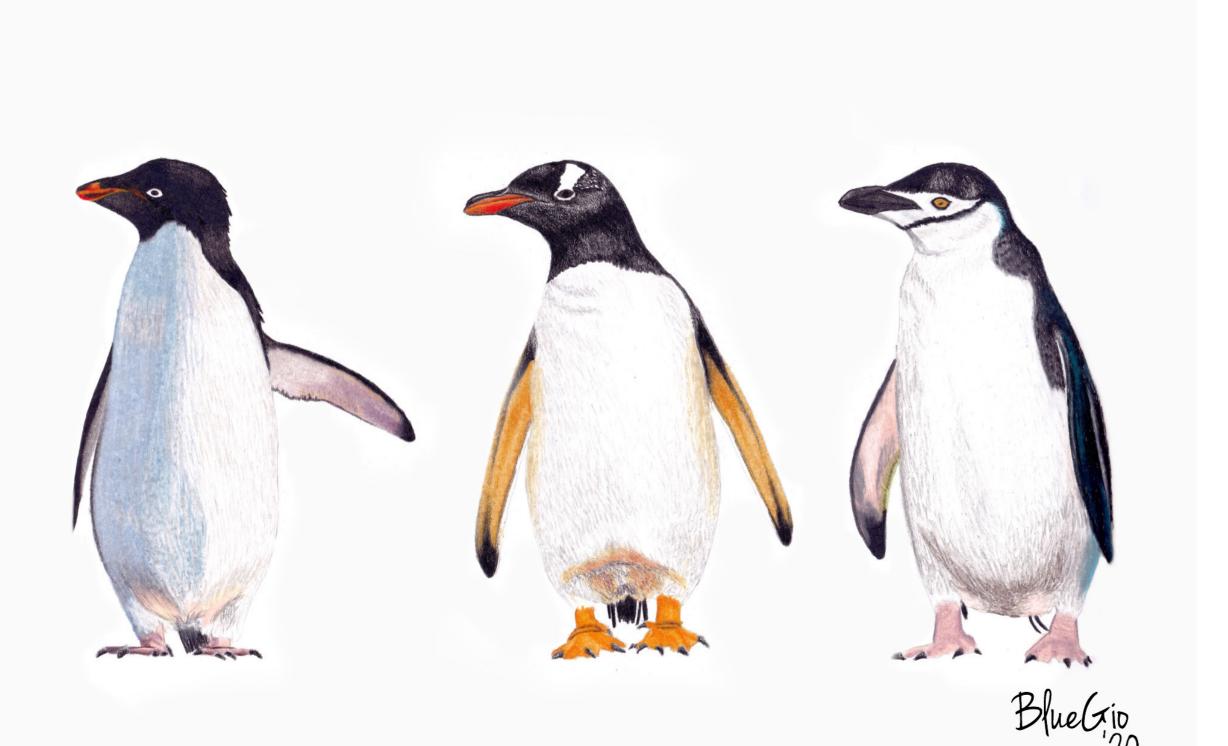
Data

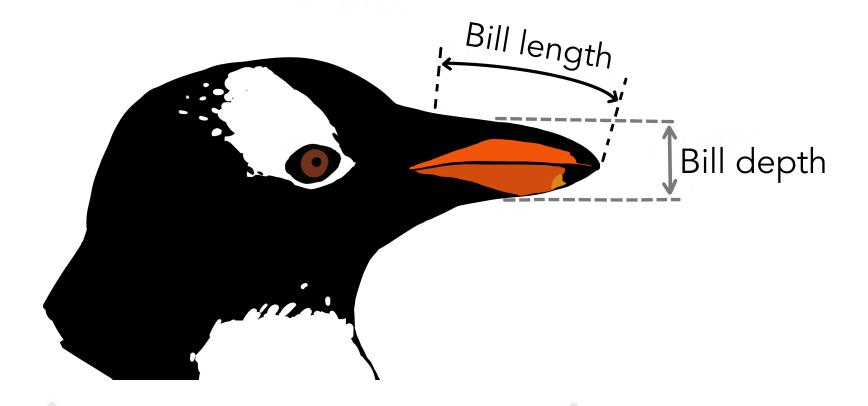
First things first

- Load the data to Google Drive.
 - Open it with Google Sheets
 - Make sure the language of Google Sheets is English
- Make column (variable) names stand out (bold, background color)
- Freeze the first row
- Look around in the data!

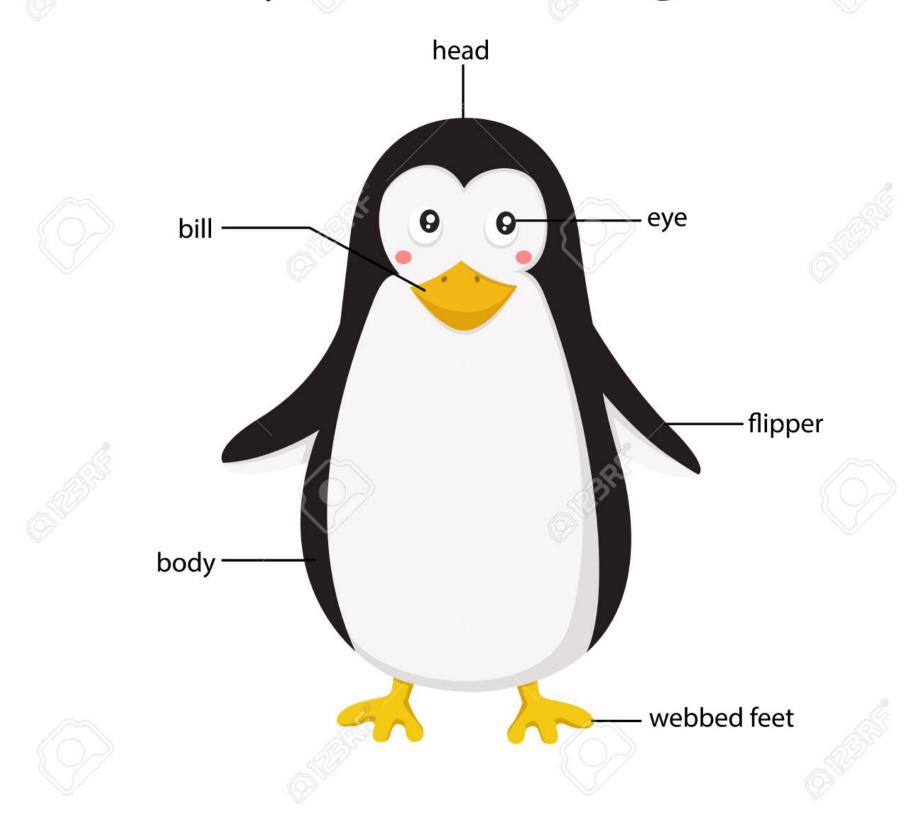
Know your penguins!







Body Parts of Penguin



warming up...

What are the variables?

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 - Their types?
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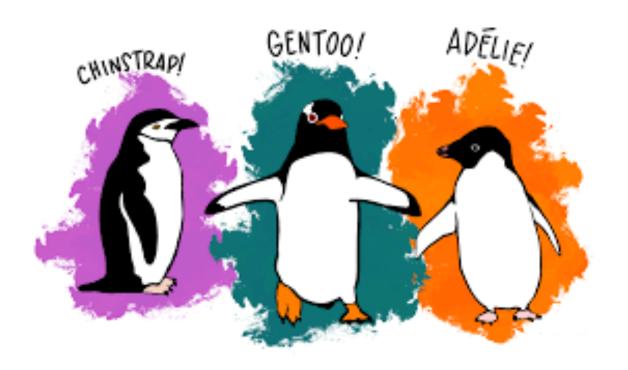
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- What are the levels(unique values) of categorical variables?(what different values do your categorical variables take)

level: easy

From: Column stats

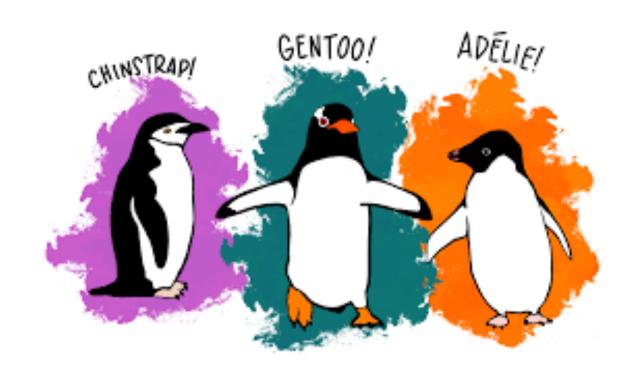
How many penguins do we have?



level: easy

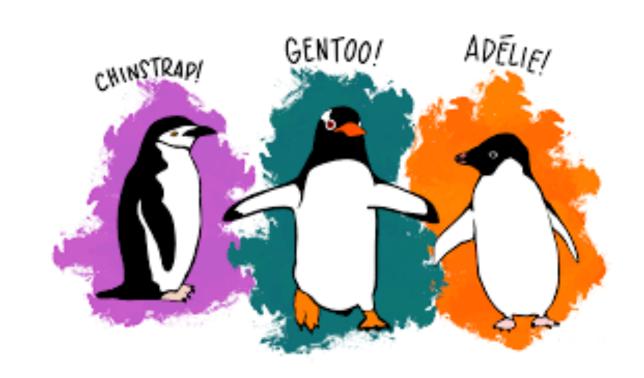
From: Column stats

- How many penguins do we have?
- Which specie has the highest number of penguins?



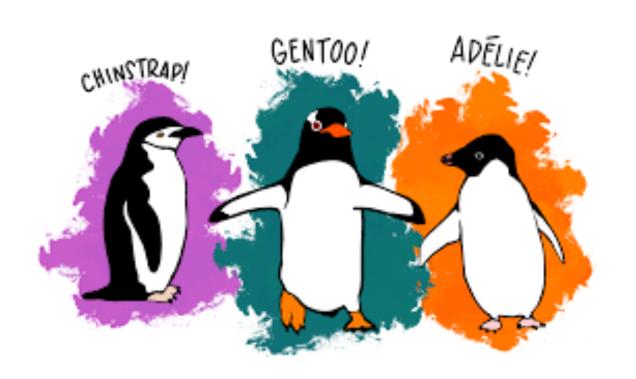
level: easy From: Column stats

- How many penguins do we have?
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- Average of flipper_length



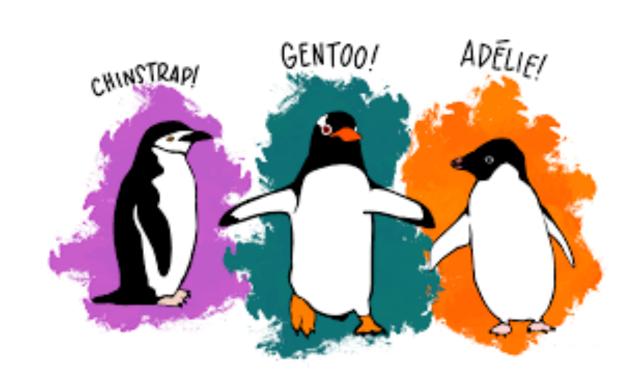
level: easy From: Column stats

- How many penguins do we have?
- Which specie has the highest number of penguins?
- Average of flipper_length
- Median value of body mass



level: easy From: Column stats

- How many penguins do we have?
- Which specie has the highest number of penguins?
- Average of flipper_length
- Median value of body mass
- Range of bill_length



- Do male penguins have higher body mass than female penguins on average?
- Did Gentoo penguins weighted more in 2009 compared to 2020?
- What is the median value for all numeric variables for each specie?
- Which island do we have the least number of penguins?
 - What percentage do they account for?
- How many female and how many male penguins do we have?
 - What percentage of the penguins are female?

Pivot tables summarise data

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- Now finish with style: Plot what we found

Level: intermediate From: Pivot Table

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level: easy-intermediate

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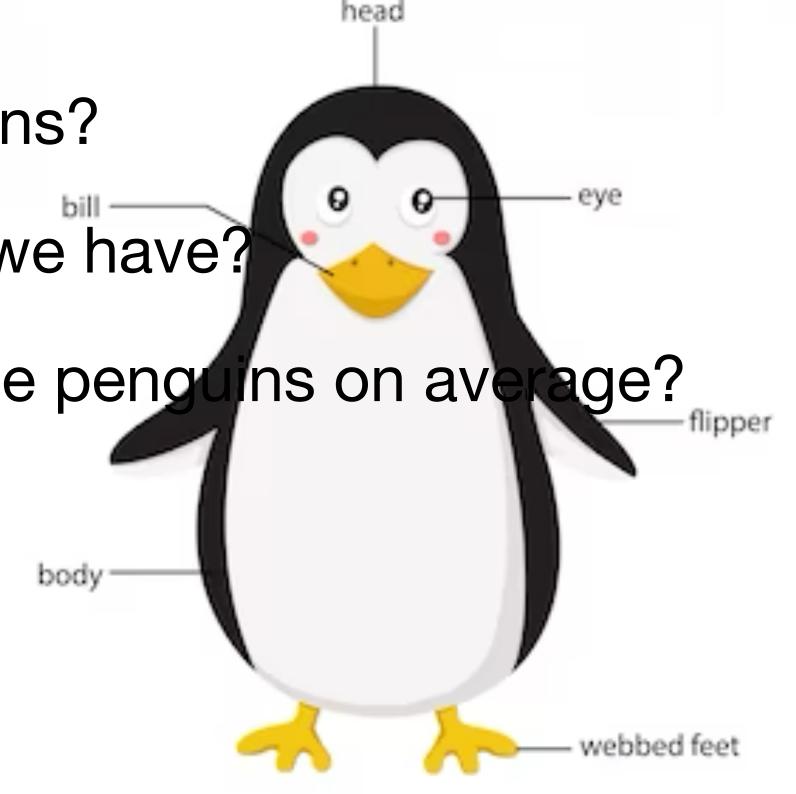
Body Parts of Penguin

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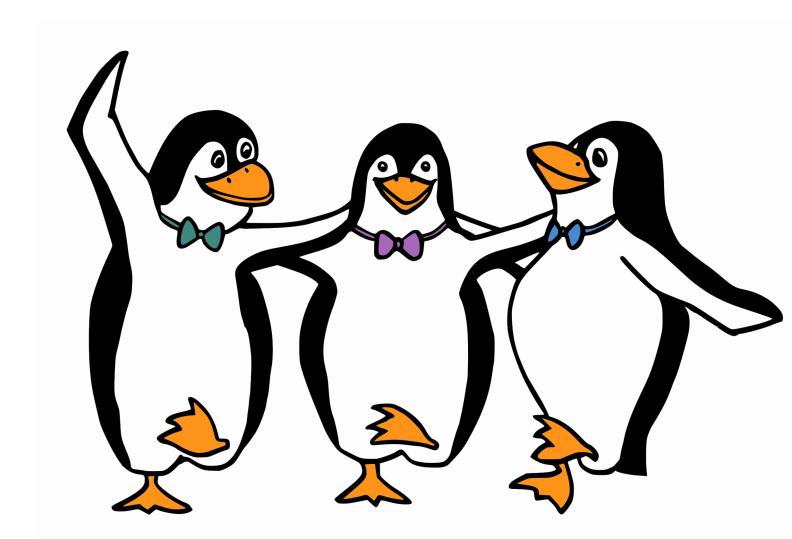


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level: easy-intermediate

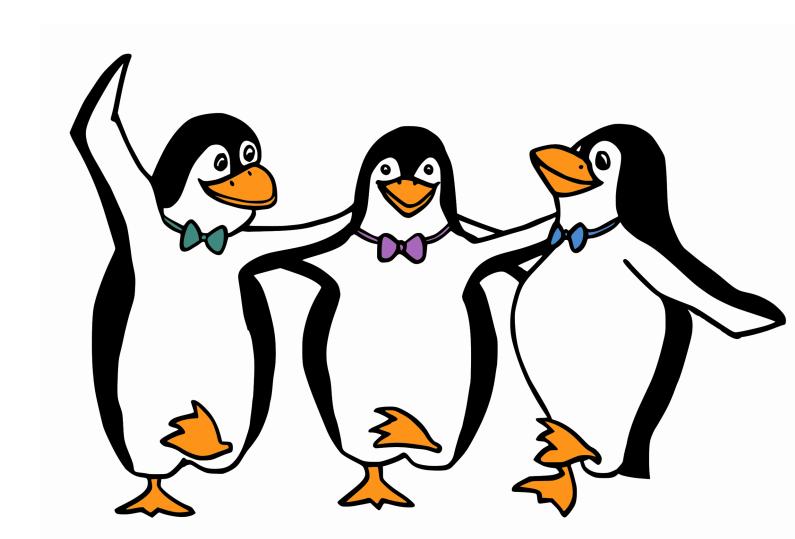
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What is my row?

level: intermediate - hard

What is my values? => what is the statistic

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level: intermediate

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level: hard

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