

Prompt 1

Variable Name	Class	Levels
Species	Factor	Adelie, Chinstrap, and Gentoo
Island	Factor	Biscoe, Dream, and Torgersen
Bill Length (mm)	Numeric	Null
Bill Depth (mm)	Numeric	Null
Flipper Length (m	Integer	Null
Body Mass (g)	Integer	Null
Sex	Factor	Female and Male

The 7 different variables can be split into three classes of data: Factor, Numeric, and Integer. Only factor variables have levels, such as Species, Island, and Sex.

Prompt 2

There were 152 adelie penguins, 68 chinstrap penguins, and 124 Gentoo penguins in total.

Prompt 3

Sex	Female	Male	NA	
# Penguins		165	168	11
Island	Biscoe Island	Dream Island	Torgersen Island	
# Penguins		168	124	52
Species	Adelie	Chinstrap	Gentoo	
# Penguins		152	68	124

	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's	
Bill Length (mm)	32.1	39.23	44.45	43.92	48.5	59.6		2
Bill Depth (mm)	13.1	15.6	17.3	17.15	18.7	21.5		2
Flipper Length (m	172	190	197	200.9	213	231		2
Body Mass (g)	2700	3550	4050	4202	4750	6300		2

Prompt 4

While there are small amounts of missing data across mutiple variables, the amount isn't significant enough to invalidate the data.
The island a penguin resides on doesn't have any noticable affect on body mass/flipper length. Instead, species determines these variables.
Gentoo are the largest penguins in terms of body mass/flipper length

Research question: Why are Gentoo larger than the other species? They are only found on Biscoe, is this related to their relative size?