

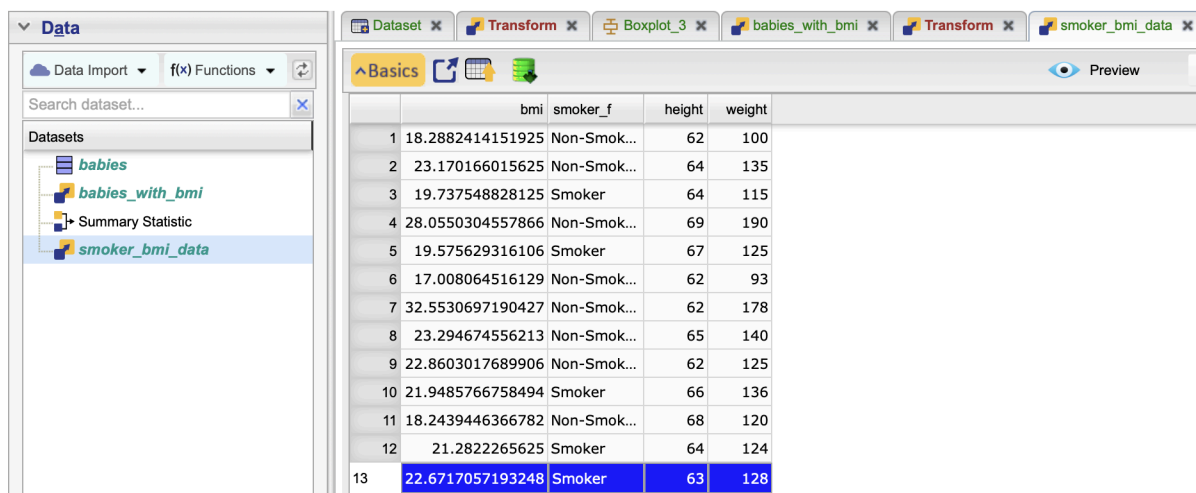
Rguroo Exercise

Now that you are familiar with the interface, complete the following exercise to practice:

a. Create a new dataframe called “smoker_bmi” from the original “babies” dataset. Include only the following variables:

- BMI = $\text{weight} / (\text{height}^2) * 703$
- Smoker_f = `ifelse(smoke == 1, 'Smoker', 'Non-Smoker')`
- Height
- Weight

Your dataset should look like this:



	bmi	smoker_f	height	weight
1	18.2882414151925	Non-Smok...	62	100
2	23.170166015625	Non-Smok...	64	135
3	19.737548828125	Smoker	64	115
4	28.0550304557866	Non-Smok...	69	190
5	19.575629316106	Smoker	67	125
6	17.008064516129	Non-Smok...	62	93
7	32.5530697190427	Non-Smok...	62	178
8	23.294674556213	Non-Smok...	65	140
9	22.8603017689906	Non-Smok...	62	125
10	21.9485766758494	Smoker	66	136
11	18.2439446366782	Non-Smok...	68	120
12	21.2822265625	Smoker	64	124
13	22.6717057193248	Smoker	63	128

b. Create a boxplot showing the distribution of BMI by Smoking Status:

- X-axis = Smoking Status (Smoker / Non-Smoker)
- Y-axis = BMI

Label the X-axis = “Smoking Status”, Y-axis = “BMI”, and the Legend Title = “Smoking Status” Your boxplot should look like this:

