



Body Fat analytics

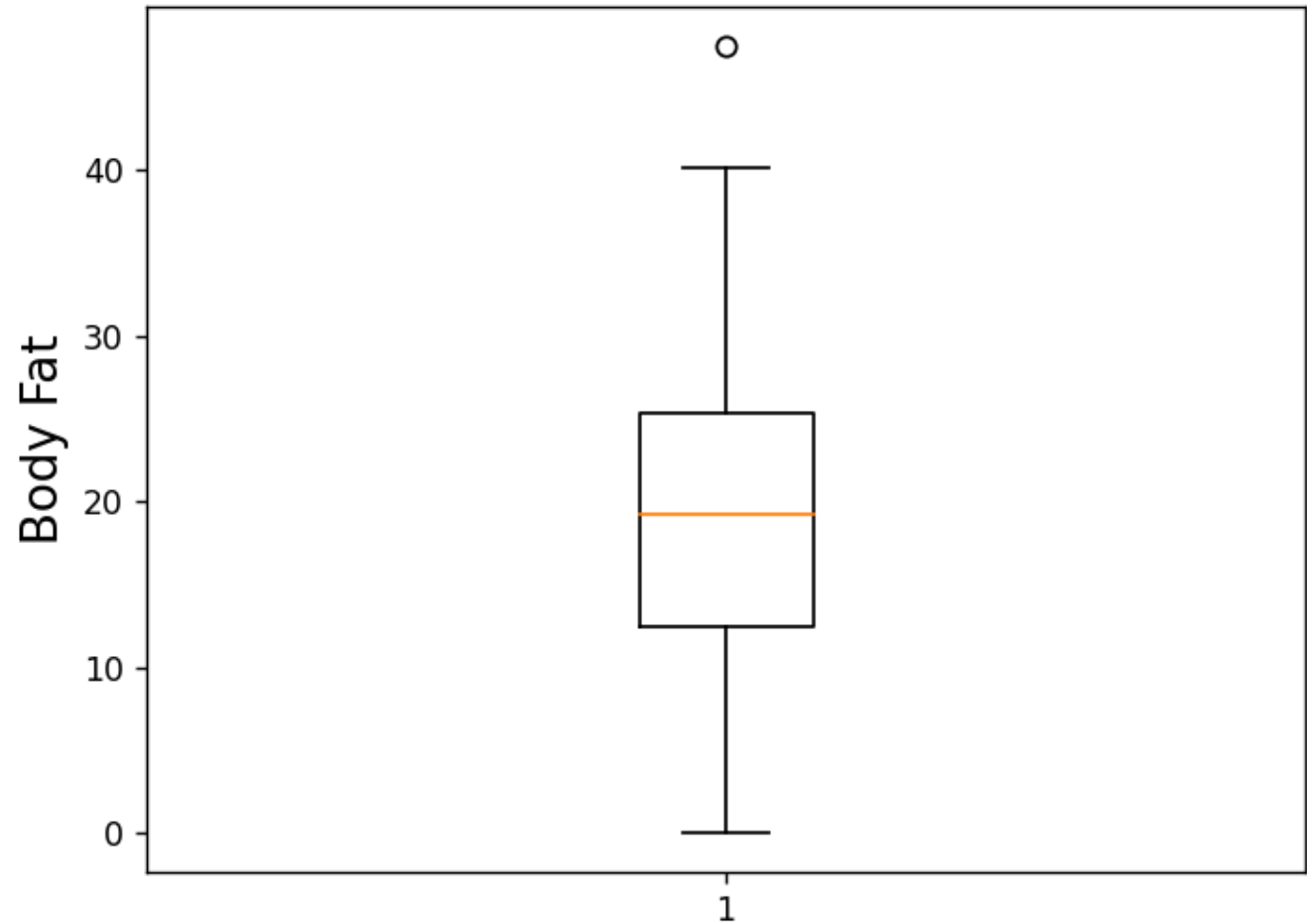
Access to code

<https://github.com/faridrh/BodyFat>

prepared for gamboo.io project
by Farid Rahimov

Distribution of Body fat among correspondents

- Average of body fat among correspondents: 19.15
- Maximum: 47.5
- Min: 9,5



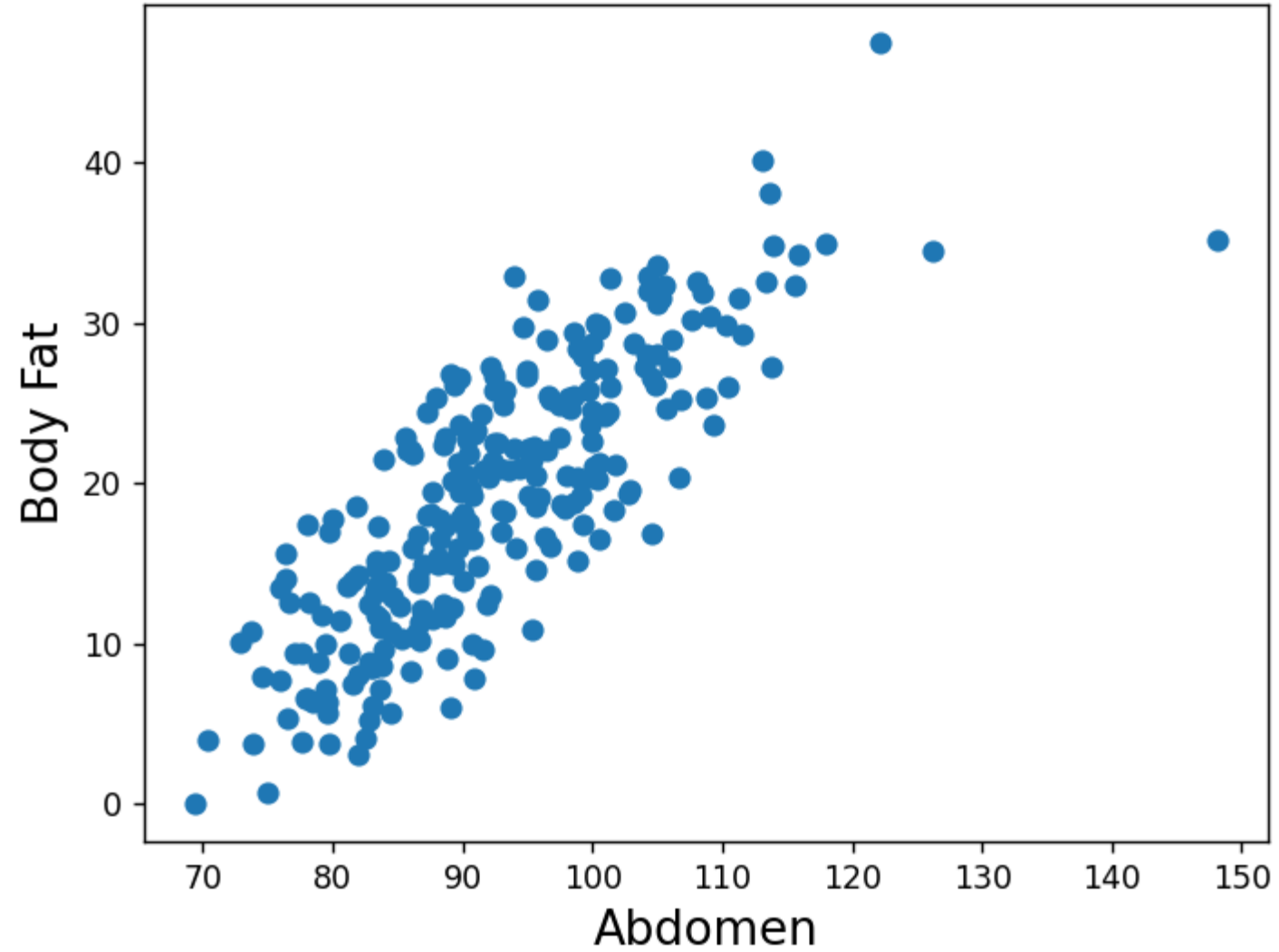
	Density	BodyFat	Age	Weight	Height	Neck	Chest	Abdomen	Hip	Thigh	Knee	Ankle	Biceps	Forearm	Wrist	BMI
Density	1.000000	-0.987782	-0.277637	-0.594062	0.097881	-0.472966	-0.682599	-0.798955	-0.609331	-0.553091	-0.495040	-0.264890	-0.487109	-0.351648	-0.325716	-0.364443
BodyFat	-0.987782	1.000000	0.291458	0.612414	-0.089495	0.490592	0.702620	0.813432	0.625201	0.559608	0.508665	0.265970	0.493271	0.361387	0.346575	0.371395

Correlation of Body Fat

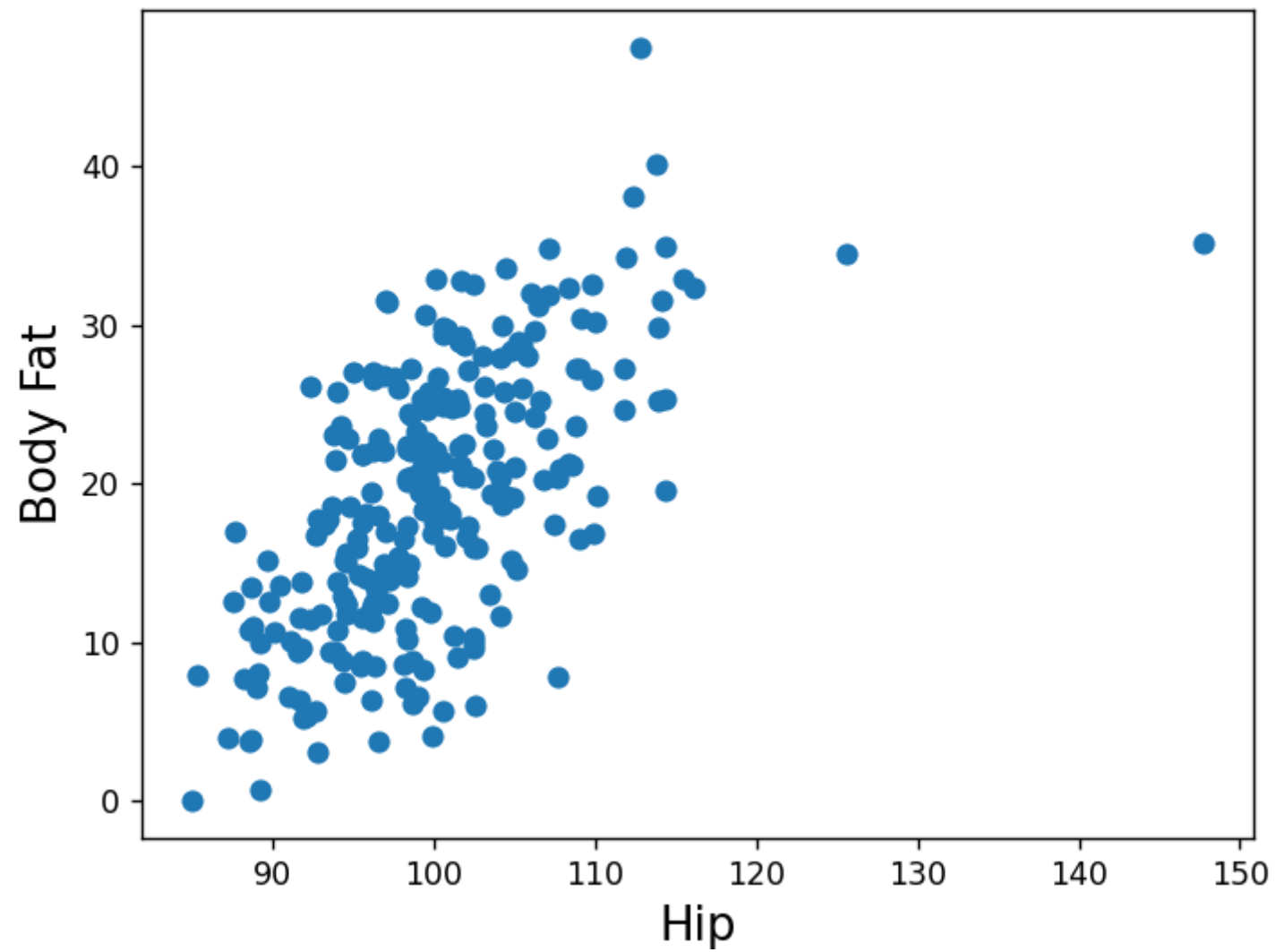
Correlation with Bodyfat:

- Abdomen
- Hip
- Weight
- Chest
- BMI body mass index (We added this column to dataset based on weight and height data in the same set)
- Height
- Density

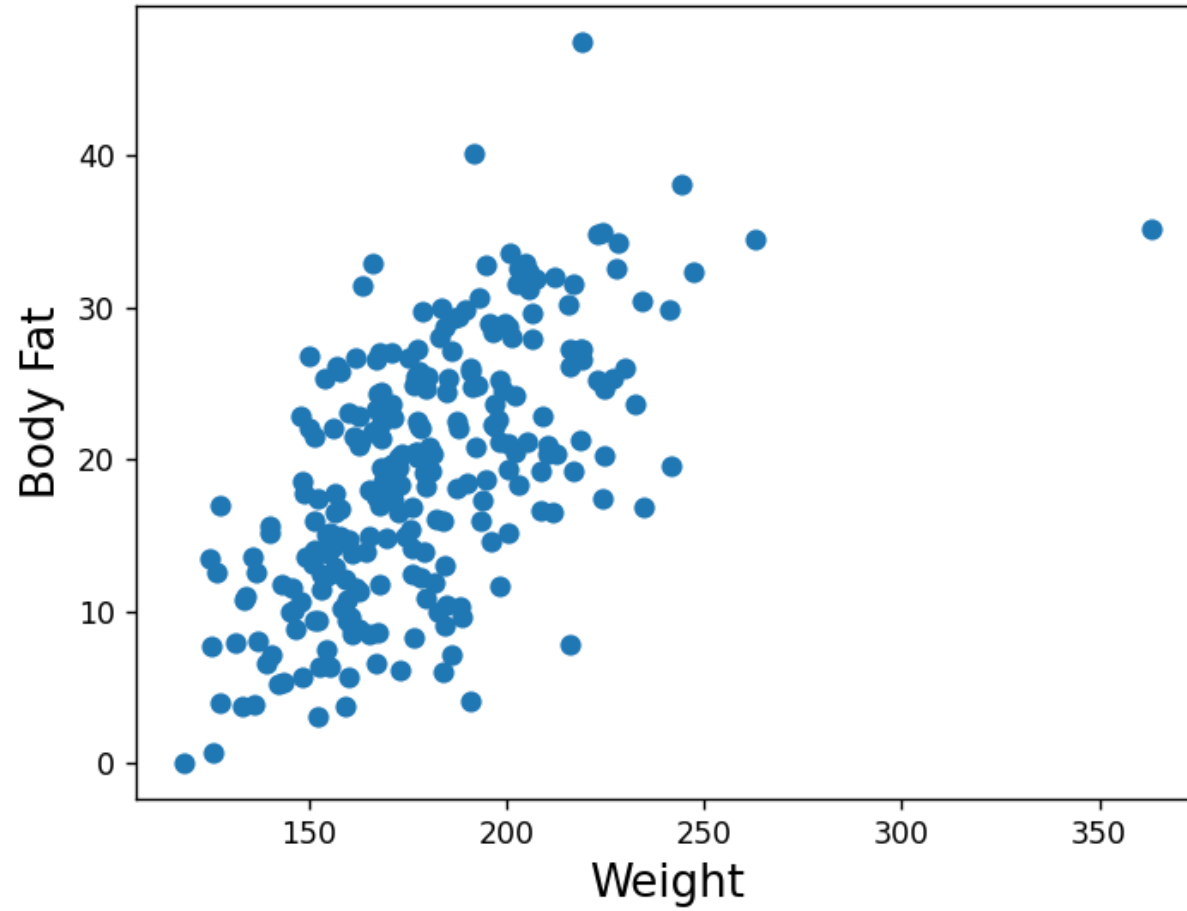
Abdomen and Body Fat scatter plot



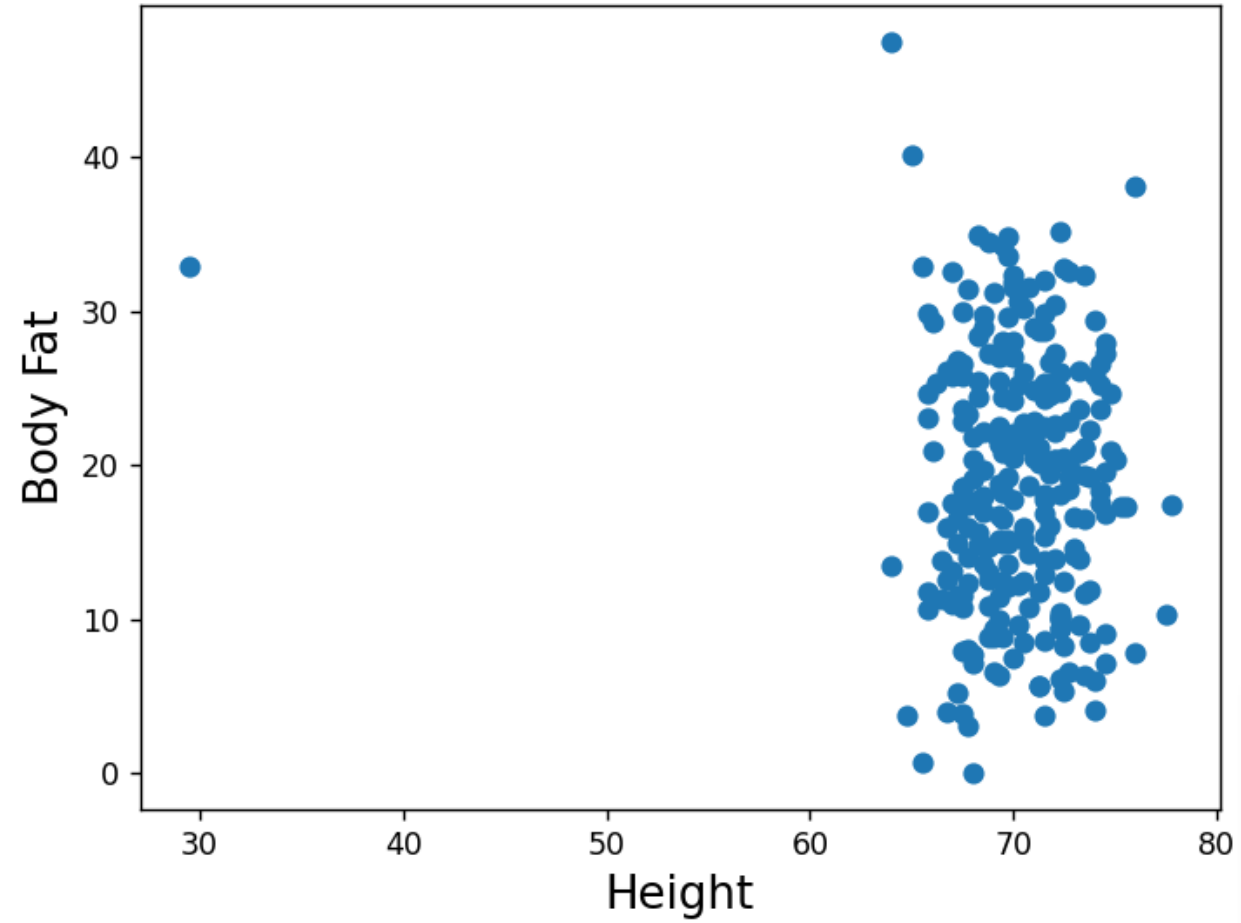
Hip and Body Fat scatter plot



Weight and Body Fat scatter plot



Height and Body Fat scatter plot



Conclusion

- Body Fat is positively correlated with the size of different body parts
- It is negatively correlated with height and positively correlated with weight, therefore we calculated BMI to find out correlation of BMI with fat and the result is 37,1 % correlation