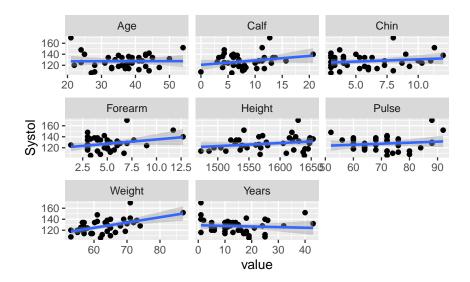
# Assignment 6: Under (blood) pressure

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### Exercise 1

## 'geom\_smooth()' using formula = 'y ~ x'



### Exercise 2

- i) Years graph, the blue regression line tilts slightly down. Therefore, there is a weak negative correlation between Years and Systol.
- ii) Forearm and Calf also show positive slopes, but Weight is the largest and most pronounced. Therefore, the answer is Weight.

### Exercise 3

```
blood_pressure_updated <- blood_pressure %>%
mutate(urban_frac_life = Years / Age)
```

# Exercise 4

systol\_urban\_frac\_model <- lm(Systol ~ urban\_frac\_life, data = blood\_pressure\_updated)</pre>

# Exercise 5

term	estimate	std.error	statistic	p.value
(Intercept) urban_frac_life			33.059770 -1.747686	0.000000

r.squaredadj.r.squar	e <b>si</b> gma	statistic p.value	df	logLik	AIC	BIC	devianced	f.residua	lnobs
0.0762564.0512904	12.769	663.0544060.08881	391	-	313.2957	7318.286	646033.372	37	39
				153.6478	8				

Exercise 6

Exercise 7

Exercise 8

Exercise 9

Exercise 10

Exercise 11

Exercise 12

Academic Integrity statement