hw2

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Problem 3

The version control can help keep all my codes, and help compare the difference between two versions. It is indispensable if I need to work with classmates on a project.

Problem 4

sensory data

Table 1: summary of sensory data.

X1	X2	X3	X4	X5
Min. :0.900	Min. :1.500	Min. :0.800	Min. :0.900	Min. :0.700
1st Qu.:2.850	1st Qu.: 3.450	1st Qu.: 2.650	1st Qu.: 3.925	1st Qu.:2.250
Median $:4.550$	Median $:4.950$	Median $:4.150$	Median $:5.400$	Median $:4.600$
Mean $:4.593$	Mean: 5.063	Mean $:4.167$	Mean $:5.193$	Mean $:4.267$
3rd Qu.:5.950	3rd Qu.:6.225	3rd Qu.:5.400	3rd Qu.:6.275	3rd Qu.:5.800
Max. $:9.000$	Max. $:9.200$	Max. $:9.000$	Max. $:9.400$	Max. $:8.800$

gold medal

Table 2: summary of gold medal data.

year	long.dump
Min. :-4.00	Min. :249.8
1st Qu.:21.00	1st Qu.:295.4
Median $:50.00$	Median $:308.1$
Mean $:45.45$	Mean $:310.3$
3rd Qu.:71.00	3rd Qu.:327.5
Max. $:92.00$	Max. $:350.5$

body weight and brain weight

Table 3: summary of weight data.

Body.Wt	Brain.wt		
Min. : 0.005	Min.: 0.10		
1st Qu.: 0.600	1st Qu.: 4.25		
Median: 3.342	Median: 17.25		

Body.Wt	Brain.wt
Mean: 198.790	Mean: 283.13
3rd Qu.: 48.203	3rd Qu.: 166.00
Max. :6654.000	Max. $:5712.00$

tomato

Table 4: table of tomato data.

variable	10000	20000	30000
Ife#1	16.1,15.3,17.5	16.6,19.2,18.5	20.8,18.0,21.0
PusaEarlyDwarf	8.1,8.6,10.1,	12.7,13.7,11.5	14.4,15.4,13.7

Problem 5

Table 5: table of linear regression result

	Dependent variable:
	pH_range
Foliage_ColorGray-Green	0.535***
	(0.180)
Foliage_ColorGreen	0.191**
	(0.092)
Foliage_ColorRed	-0.252
	(0.403)
Foliage_ColorWhite-Gray	0.468*
	(0.276)
Foliage_ColorYellow-Green	-0.202
	(0.196)
Constant	2.177***
	(0.087)
Observations	832
R^2	0.020
Adjusted R ²	0.014
Residual Std. Error	0.786 (df = 826)
F Statistic	$3.322^{***} (df = 5; 826)$
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 6: table of anova result

(Intercept)	green	yellow_green	dark_green	white_gray	gray_green	red
1.925	0.443	0.050	0.252	0.719	0.787	