

VARIABLE INVESTIGATION

FOR

KELOWNA WEATHER-CRASH PROJECT

Variable 1

```
> load_first_object <- function(fname){
+   #this function was written by Dr. Rhonda Rosychuk at the U of A
+   e <- new.env(parent = parent.frame())
+   load(fname, e)
+   return(e[[ls(e)[1]]])
+ }
> weatherdata = load_first_object("../rda_files/all_data.rda")
> summary(weatherdata)
```

linker	Date.Of.Loss.Year	Animal.Flag	Crash.Severity
Length:56136	Min. :2017	No :54118	CASUALTY CRASH :11473
Class :character	1st Qu.:2018	Yes: 2018	PROPERTY DAMAGE ONLY:44663
Mode :character	Median :2019		
	Mean :2019		
	3rd Qu.:2020		
	Max. :2021		

Cyclist.Flag	Day.Of.Week	Derived.Crash.Configuration
No :55725	FRIDAY :9316	REAR END :13024
Yes: 411	MONDAY :8024	SINGLE VEHICLE :12495
	SATURDAY :6753	UNDETERMINED :11453
	SUNDAY :5464	SIDE IMPACT :11369
	THURSDAY :9061	CONFLICTED : 3068
	TUESDAY :8728	SIDE SWIPE - SAME DIRECTION: 1833
	WEDNESDAY:8790	(Other) : 2894

Heavy.Veh.Flag	Intersection.Crash	Month.Of.Year	Motorcycle.Flag
No :54085	No :31677	JULY : 5152	No :55673
Yes: 2051	Yes:24459	DECEMBER: 5095	Yes: 463
		JANUARY : 5063	
		AUGUST : 4907	
		OCTOBER : 4836	
		JUNE : 4735	
		(Other) :26348	

Parked.Vehicle.Flag	Parking.Lot.Flag	Pedestrian.Flag
No :38567	No :37189	No :55790
Yes:17569	Yes:18947	Yes: 346

Street.Full.Name..ifnull.	Time.Category	Municipality.Name
HWY 97 : 6019	12:00-14:59:14870	KELOWNA :45943
HARVEY AVE : 3168	15:00-17:59:14473	WEST KELOWNA:10193

HWY 33	: 2064	09:00-11:59:11021	
GORDON DR	: 1921	18:00-20:59: 5805	
LAKESHORE RD	: 1372	06:00-08:59: 5489	
SPRINGFIELD RD:	1326	21:00-23:59: 2684	
(Other)	:40266	(Other)	: 1794
Road.Location.Description		Street.Full.Name	Metric.Selector
UNKNOWN	: 2211	HWY 97	: 6019 Min. :1.000
HWY 97	: 1961	HARVEY AVE	: 3168 1st Qu.:1.000
HARVEY AVE	: 1670	HWY 33	: 2064 Median :1.000
LAKESHORE RD:	932	GORDON DR	: 1921 Mean :1.006
LOUIE DR	: 751	LAKESHORE RD	: 1372 3rd Qu.:1.000
HWY 33	: 715	SPRINGFIELD RD:	1326 Max. :3.000
(Other)	:47896	(Other)	:40266
Total.Crashes	Total.Victims	Temp...C.	Dew.Point.Temp...C.
Min. :1.000	Min. :0.0000	Min. : -22.43	Min. : -24.433
1st Qu.:1.000	1st Qu.:0.0000	1st Qu.: 1.60	1st Qu.: -2.033
Median :1.000	Median :0.0000	Median : 10.37	Median : 2.200
Mean :1.006	Mean :0.2917	Mean : 10.92	Mean : 1.906
3rd Qu.:1.000	3rd Qu.:0.0000	3rd Qu.: 20.00	3rd Qu.: 7.300
Max. :3.000	Max. :9.0000	Max. : 37.73	Max. : 18.733
		NA's :35	NA's :35
Rel.Hum....	Precip..Amount..mm.	Wind.Dir..10s.deg.	Wind.Spd..km.h.
Min. : 12.67	Min. :0.00000	Min. : 1.00	Min. : 0.000
1st Qu.: 38.00	1st Qu.:0.00000	1st Qu.:15.67	1st Qu.: 4.667
Median : 62.00	Median :0.00000	Median :19.50	Median : 8.000
Mean : 60.51	Mean :0.03111	Mean :21.16	Mean :10.277
3rd Qu.: 82.33	3rd Qu.:0.00000	3rd Qu.:31.00	3rd Qu.:13.667
Max. :100.00	Max. :4.00000	Max. :36.00	Max. :51.333
NA's :35	NA's :35	NA's :4020	NA's :35
Visibility..km.	Stn.Press..kPa.	Wind.Chill	Fog
Min. : 0.20	Min. :94.08	Min. : -27.50	Min. :0.00000
1st Qu.:16.10	1st Qu.:96.10	1st Qu.: -12.33	1st Qu.:0.00000
Median :16.10	Median :96.51	Median : -6.33	Median :0.00000
Mean :15.15	Mean :96.56	Mean : -8.48	Mean :0.07179
3rd Qu.:16.10	3rd Qu.:96.90	3rd Qu.: -4.00	3rd Qu.:0.00000
Max. :16.10	Max. :99.33	Max. : -1.00	Max. :1.00000
NA's :36	NA's :35	NA's :45152	
Freezing.Rain	Snow	Rain	Thunderstorms
Min. :0.00e+00	Min. :0.00000	Min. :0.000	Min. :0.000000
1st Qu.:0.00e+00	1st Qu.:0.00000	1st Qu.:0.000	1st Qu.:0.000000
Median :0.00e+00	Median :0.00000	Median :0.000	Median :0.000000
Mean :3.56e-05	Mean :0.06789	Mean :0.108	Mean :0.002387
3rd Qu.:0.00e+00	3rd Qu.:0.00000	3rd Qu.:0.000	3rd Qu.:0.000000
Max. :1.00e+00	Max. :1.00000	Max. :1.000	Max. :1.000000