

```
> aggregate(safi$no_membrs, by=list(safi$village), mean)
```

	Group.1	x
1	Chirodzo	7.076923
2	God	6.860465
3	Ruaca	7.571429

```
> aggregate(safi$rooms, by=list(safi$village, safi$respondent_wall_type), mean,  
na.rm=TRUE)
```

	Group.1	Group.2	x
1	Chirodzo	burntbricks	2.590909
2	God	burntbricks	1.684211
3	Ruaca	burntbricks	2.000000
4	Ruaca	cement	3.000000
...			

```
> tmp<- aggregate(safi$rooms, by=list(safi$village, safi$respondent_wall_type),  
mean, na.rm=TRUE)
```

```
> tmp[order(tmp$Group.1, tmp$Group.2),]
```

	Group.1	Group.2	x
1	Chirodzo	burntbricks	2.590909
5	Chirodzo	muddaub	1.187500
8	Chirodzo	sunbricks	1.000000
2	God	burntbricks	1.684211
6	God	muddaub	1.266667

# Apply

```
apply(X, MARGIN, FUN, ...)
```

```
  MARGIN=1 - rows
```

```
  MARGIN=2 - columns
```

```
apply(africa[, -1:-2], 2, mean, na.rm=TRUE)
```

gdp_2017	pop_2017	area	rail	road
2.190350e+10	2.323929e+07	5.551491e+05	2.341742e+03	4.406992e+04