

# tapply

```
aggregate(africa$pop_2017, list(africa$region), mean)
```

```
  Group.1      x
1 central 17915179
2   east 23673746
3  north 38598350
4  south 12770885
5   west 23284215
```

```
tapply(africa$pop_2017, africa$region, mean)
```

| central  | east     | north    | south    | west     |
|----------|----------|----------|----------|----------|
| 17915179 | 23673746 | 38598350 | 12770885 | 23284215 |

# tapply

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

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

|          | burntbricks | cement | muddaub  | sunbricks |
|----------|-------------|--------|----------|-----------|
| Chirodzo | 2.590909    | NA     | 1.187500 | 1.000000  |
| God      | 1.684211    | NA     | 1.266667 | 1.666667  |
| Ruaca    | 2.000000    | 3      | 1.333333 | 1.428571  |