

[illegible]

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[illegible]

[illegible]

```
.68,0,0,0,0,0,0,0,0,0,2.041,0,0.68,0,0.685,0,8.904,31.507,0.685,0,0,0,0,0,0,0,0,0,0,0.699,0,0,0,0,0,0,
,0,0,0,0.694,0,0.694,0,0,61.806,0,0,0,0,0,0,15.493,0,0,0,99.306,0,0,0,97.222,0,0,0,0,0,0,29.167,0,0
,0,47.222,0,0,0,0,0,0,0,0,0.709,0,0,1.418,2.128,0.709,0,0.709,0.709,2.837,0,0,7.801,0,0,0,0.709,0
,0,0,0,77.857,0,0,0,0,0,15.108,13.043,0,2.206,0,0,0,0,0,0,0,0,0,0,0,0,2.381,0,0,0,0,1.613,1.639,0,2
7.119,5.085,0,78.571,0,0,0,0,0,10.811,0,0,30.5,0,0,0,8.333,0,0,3.03,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,9.524,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,5.97,0,0,0,0,0,0,2.941,0,0,30.435,0,0,1.
449,0,0,0,0,0,0,0,60,0,61.429,5.714,0,0,7.246,2.899,1.429,2.857,0,0,1.493,1.515,3.125,0,0,1.961,0,0
,0,0,0,0,10.256,4.545,0,0,0,2.174,10,0,2.273,23.214,31.034)
> y10 <- c(0,0,4.348,0,0,3.333,0,0,1.408,0,1.389,1.099,2.128,0,0,1.02,0,2.02,1.01,0.98,7.692,2.80
4,7.826,0,0,0,0,0,2,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,3.333,0,0,0,0,0.671,0,97.315,0,0.
676,0,0,0,0,0,1.342,0,0,0,0,0,0,0,0,0,2,0,0.667,0,0,0,94.667,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0.667,0,0,0,0,0,0,0,0,0,2,81.333,0,0,0,4,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.671,0,0,0,2.667,0,4.
667,0,0,0,0,98.667,0.667,2.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.333,0,0,0,0.667,0,0.67
1,0,0,0,0,0,0,0.667,0,4,0,0,0,0,1.342,0,0,1.333,12.667,0,0,0,0,0,0,0,92.617,0,0,0,0,0,0,0,0,0,0,0.6
67,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,1.333,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,63.333,0,0,0
,0,26.667,0,0.671,0.671,0,0,0,0.671,0,30.872,0,0,33.333,0,0.68,0,14.286,0,0,0,0,0,1.361,0,0.68,0,
0,0,0,0,0,2.027,0,1.351,0,0.68,0,15.646,31.973,0,0,0,0,0,0,0,0.676,0,0,0,3.378,0,0)
> y11 <- c(0,0,0,0,0,0,0,0,0,0,0,0,0,65.101,0,0,0,0,0,16.779,0,0,0,100,0,0,0,97.315,0,0,0,0,0,0,0,36.
913,0,0,0,45.946,0,0,0,0.676,0,0,0,0,0,0,0,0,0.69,1.379,0,0,0,2.069,0,0,5.517,0,0,0,0,0,0,0,0,0,82.
069,0,0,0,0,15.172,14.483,0,0,0,0,35.135,2.985,18.644,0,0,0,5.455,0,0,0,0,0,0,0,2,0,0,0,0,0,0,0,93.
333,0,0,47.727,0,0,0,0,0,0,0,0,0,0,5.556,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,83.333,0,16.667,83.333,8
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.299,1.923,0,0,3.03,0,0,2.857,0,0,
0,0,0,0,0,0,3.425,0,0,0,4.11,0,0.685,52.055,0,0,0,0.68,0,0,25,0,0.676,0.671,0,0,2,0,0,0,0,0,0,0,2
0.667,0,0,0,0.667,0,1.333,46.667,0,0,0,0,0,0,0,0,0,0,22,0,0,64.667,0,0,2.667,0,0,0,0.671,3.333,0,
3.333,0,1.333,0,0,5.333,0,0.671,0,0,0,0,0,0,1.333,0,0,0,0,10.667,0,1.37,0,6.667,10,0,2.667,0,0,3.
333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,11.333,1.333,0,0,0,11.333,0,2.667,0,0,2.667,0,0,0,0,0,0)
> y12 <- c(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,0,0,0,0,0,0,0,0,0.667,0,93.333,0.667,2,0.667,0,71.333,
4,0,0,0,10.667,0,0,0,0,0,0,0,0,0.667,0,0,0,1.333,6,28,0,0,0,0,31.333,0,0,2.797,0,0.667,0,0,0,4,0.
667,0,0.667,0.667,0.667,0.667,0,0,0,3.333,0,0,1.333,14,0,0,1.333,0,0.667,0,1.333,0,2,0,4.667,0,0,
0,0,2.013,0,0,4.698,0,0,0,0.667,0.667,0.667,0,0,0,0.671,39.333,0,0,0,1.333,0,0,0.667,0,0,0,98.6
67,0,0,0,0,0,0,0,0,20.667,0,0.667,0.667,18.919,0,6.711,2.013,1.351,0,4.054,0,0,0,0,0,0.676,0.67
1,0,0,0,0,0,17.333,0,0,0,0,0,0,0,4.667,0,1.333,2.013,0,0,0.676,0.676,1.361,0,0,0,0,0,0,0,0,0.68,0
,0,0,0,0,0.676,3.378,0,0,0,7.432,0,1.351,1.351,0,0.676,3.378,0,36.486,1.351,7.432,0,12.162,0,0,
0,0,0.676,0,39.189,0,0,0,0,0,0,4.054,0,0,0,18.243,0,0,0,0,0,13.699,0,0,0,0,0,9.589,0,28.082,0,4
.795,13.699,0,0.685,0,1.37,0,0,0,0.694,0,0,0,0,0,0,1.493,0,0,0,0.8,0,0,31.452,45.902,0,10.811,0
.935,10,1.064,0,0,0,1.299,0,0,1.961,0,0,0,0,1.754,0,0,1.818,0,0,1.852,1.961,0,0,0,0,0,0,0)
> y <- c(y0,y1,y2,y3,y4,y5,y6,y7,y8,y9,y10,y11,y12)
> cor.test(x, y, alternative = "two.sided", method = "spearman", exact=FALSE )
```

Spearman's rank correlation rho

```
data: x and y
S = 6179455542, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
rho
0.3720665
```

```
> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()) {install.packages("RVAideMemoire")}
> library(RVAideMemoire)
*** Package RVAideMemoire v 0.9-83-3 ***
> spearman.ci(x,y)
```

Spearman's rank correlation

```
data: x and y
1000 replicates

95 percent confidence interval:
0.3441082 0.4002181
sample estimates:
rho
0.3720665
```

```
>
```