```
R version 4.3.1 (2023-06-16 ucrt) -- "Beagle Scouts"
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Platform: x86_64-w64-mingw32/x64 (64-bit)

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  Natural language support but running in an English locale

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Type 'demo()' for some demos, 'help()' for on-line help, or
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Type 'q()' to quit R.

[Previously saved workspace restored]

> rm(list = ls())
> x0 <- c(69,66,93,85,29,68,22,27,34,15,1,46,43,4,17,61,52,0,39,44,33,0,35,56,19,33,86,85,34,92,2
7,47,80,56,45,33,58,64,23,26,49,19,6,29,26,0,19,58,29,0,56,73,5,6,18,30,2,1,31,0,0,0,2,2,1,3,12,5
0,12,70,64,78,44,8,53,62,5,14,64,35,4,60,48,9,6,58,53,6,2,31,45,0,0,49,20,0,4,55,21,0,43,70,45,56
,0,1,63,75,19,69,22,88,58,9,63,54,27,87,80,32,31,71,29,25,19,62,8,7,53,39,8,22,52,42,9,39,75,30,8
0,50,32,68,21,1,41,60,27,13,25,44,9,48,39,44,76,92,57,70,61,32,48,48,39,20,80,26,22,6,2,12,1,6,3,
20,46,4,21,56,30,0,50,52,3,44,76,47,57,84,73,1,49,70,29,12,52,66,16,25,52,25,3,42,48,10,16,66,46,
3,43,66,8,7,75,22,1,17,52,0,3,25,30,12,12,1,15,40,13,6,61,13,82,45,47,43,22,11,79,48,0,25,39,0,8,
40,1,2,25,41,0,2,43,41,1,5,58,55,18,3,3,59,29,5,48,62,43,5,66,54,59,7,57,80,11,17,70,15,1,17,6,0,
11,19,3,0,25,7,5,8,6,8,6,3,0,4,0,2,5,0,25,1)
> x1 <- c(3,18,53,57,24,70,5,41,46,54,7,0,9,15,0,2,0,16,0,3,6,29,1,4,1,0,7,0,1,0,0,0,1,0,0,3,0,0,
0,15,6,33,79,45,90,25,45,73,57,32,31,53,33,0,9,53,19,0,3,46,5,1,50,5,4,17,5,28,52,53,14,6,11,35,6
,0,2,7,0,0,41,46,10,74,9,28,20,52,1,0,4,2,0,27,26,1,2,28,30,1,9,12,34,1,4,24,1,4,4,11,1,7,4,1,0,1
,5,2,1,18,49,45,32,69)
> x <- c(x0,x1)
> y0 <- c(0.97625,0.87375,1,1,0.98,0.90125,0.99125,0.73125,0.22875,0.45125,0.765,0.22375,0.05,0.1
3625,0.23875,0.03625,0.18125,0.13375,0.19125,0.465,0.6075,0.3125,0.8875,0.885,0.95875,0.99625,1,1
,1,1,1,1,1,1,1,1,0.99875,1,1,0.96375,0.895,0.92,0.31125,0.76625,1,0.60625,0.77875,0.99875,0.99625,0
.54625,0.96,1,0.94625,0.82,0.99125,1,0.99,0.70375,0.93625,0.99,0.5575,0.865,0.2625,0.61875,0.9975
,0.91375,0.87875,0.86125,1,0.99875,1,1,1,0.99875,0.94375,0.7,1,0.98625,0.38375,0.54,0.99375,0.981
25,0.69125,0.2975,0.99875,0.99875,0.66875,0.24875,0.99875,0.865,0.16375,0.51875,0.7,0.05625,0.13,
0.38375,0.15625,0.2575,0.21625,0.305,0.4675,0.9,0.86625,0.795,0.99875,0.91625,0.77,1,1,0.99875,1,
1,1,1,0.99875,1,1,1,1,1,1,1,1,1,1,1,0.99875,1,0.9975,0.91125,0.82625,0.99875,0.98875,0.2975,0.991
25,1,0.63,0.505,0.895,1,0.99625,0.99875,0.99875,1,0.9625,0.9925,1,0.99,0.99625,0.9975,1,1,1,1,1,1
,1,1,1,1,1,1,1,1,0.99875,1,0.99875,1,0.99125,0.99625,0.97625,0.38,0.97875,0.735,0.3,0.9525,0.64,0
.32375,0.6425,0.995,0.17,0.9425,0.91625,0.67125,0.99375,1,1,1,1,1,0.9675,0.99875,0.7625,0.8925,0.
60625,0.995,0.96625,0.99875,1,0.7075,0.905,0.895,1,0.52625,0.6875,0.995,1,0.785,0.8075,1,0.86125,
0.59,0.99625,0.93625,0.5075,0.95625,0.5025,0.22375,0.5575,0.7775,0.20125,0.72,0.95875,0.57625,0.6
3125,0.88375,0.99,0.6525,0.97,1,1,1,1,0.99875,1,0.99875,0.90875,1,1,0.93,0.69125,0.92,0.94875,0.6
6625,0.3325,0.51125,0.73625,0.41,0.3225,0.4975,0.6675,0.05875,0.225,0.9975,0.935,0.15125,0.0475,0
.725,0.96375,0.18625,0.13,0.51625,0.96875,0.79125,0.8575,0.98625,0.99375,1,1,1,0.3975,0.565,1,0.9
9875,0.53625,0.93125,0.98875,0.91125,0.56125,0.97125,0.6325,0.36625,0.4925,0.94375,0.61625,0.1,0.
70125,0.99875,1,0.99875,1,1,0.97125,0.96375,0.9525,0.9075,0.985,0.975,0.98625,1,0.9875)
> y1 <- c(0.98375,1,1,1,1,1,0.9975,1,1,1,0.98375,0.8675,1,0.93875,0.94125,0.99375,0.88125,0.8,0.9
5125,0.99875,0.99875,0.9725,1,1,1,0.645,1,0.23,0.59875,0.97125,0.9775,0.1725,0.33,0.91625,0.6225,
0.85125,0.905,0.99,0.97125,0.98625,0.995,1,1,1,1,1,0.97,0.8525,0.8525,1,0.6775,0.39625,0.8775,0.5
2375,0.1475,0.43,0.8825,0.2575,0.48125,0.6575,0.875,0.99625,0.92375,0.92625,1,1,1,1,1,1,1,1,1,0.9
975,0.9825,0.93125,0.97375,0.99,0.305,0.75375,1,0.99,1,1,1,1,1,1,1,0.9875,0.99875,0.9925,0.97125,
1,1,0.93375,1,0.9975,0.63125,0.75,1,0.99125,0.4475,1,1,0.40375,0.8825,1,0.98625,0.87875,0.99875,1
,0.98375,0.94625,0.97375,0.9825,0.9575,0.90125,0.9375,1,1,0.99875,1,1)
> y <- c(y0,y1)
> cor.test(x, y,alternative = "two.sided", method = "spearman", exact=FALSE )

        Spearman's rank correlation rho

data:  x and y
S = 8877485, p-value = 2.426e-10
alternative hypothesis: true rho is not equal to 0
sample estimates:
```

```
      rho
0.301211

> # ---- 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:
 0.2098635 0.3864537
sample estimates:
      rho
0.301211

>
```