

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
 'help.start()' for an HTML browser interface to help.
 Type 'q()' to quit R.

[Previously saved workspace restored]

```
> rm(list = ls())
> x <- c(-25.57,-259.13,-123.68,42.95,41.08,-215.99,59.91,-264.74,115.76,-44.26,88.48,-70.54,-204.91,-253.21,-81.95,8.68,116.56,24.34,-206.96,28.12,-314.62,-138.75,-204.2,-311.19,-109.5,-171.39,-15.36,-138.45,34.8,36.12,25.49,-211.63,50.21,88.73,-131.89,-339.76,-1121.5,-269.62,-205.9,-240.29,-37,-552.59,623.18,-167.86,245.15,-156.89,-358.48,-133.29,754.63,-130.66,-91.09,-9.55,-10.98,-21.85,-97.77,-337.84,-270.71,-96.72,-11.01,-355.63,-277.51,19.05,-27.43,-5.18,13.32,43.59,-21.71,0.21,17.19,12.35,-76.28,21.39,196.24,-371.14,-315.78,56.68,14.49,-61.17,-27.64,27.93,-311.63,16.73,209.82,-325.1,-322.67,-33.4,6.56,-65.81,7.43,432.95,14.69,42.56,-83.16,-104.41,11.19,-61.89,7.39,41.89,-1.22,-55.4,35.46,-57.04,25.78,-26.16,48.37,-611.08,668.87,-260.16,0.83,-57.24,-13.16,-102.31,-64.1,-367.6,220.47,-300.64,678.41,698.33,-164.91,24.83,50.54,25.7,604.56,27.47,-122.92,-20.35,-41.17,-127.81,-155.13,-155.06,-29.12,-148.73,27.31,-9.07,-133.34,67.23,-9.9,-132.19,-273.08,-138.08,-24.37,-120.08,-69.47,399.41,51.58,657.17,-46.88,-199.33,-52.65,-75.38,-53.85,-193.25,504.02,-89.05,-0.84,-221.81,-11.88,62.93,-3.41,-249.2,-25.36,-25.47,13.6,-213.49,86.9,-101.71,-53.79,52.99,9.21,37.3,-80.8,10.18,-83.4,7.95,-78.96,76.02,14.65,94.16,542.79,238.88,71.83,73.39,35.38,57.75,69.71,94.66,125.98,57.91,131.53,626.29,690.15,758.12,696.69)
> y <- c(169.92,393.73,253.06,87.74,94.5,338.63,108.72,404.71,27.48,173.95,45.73,207.2,347.53,383.39,224.64,141.78,39.79,126.85,346.96,120.71,462.33,261.56,344.62,463.8,225.3,290.24,165.7,292.63,121.36,117.22,132.27,367.63,107.32,61.13,262.7,489.03,1273.48,417.71,351.17,404.13,158.91,660.83,-505.81,277.86,-129.27,277.29,425.91,198.14,-646.17,198.49,155.56,67.75,70.45,76.11,166.09,409.63,342.18,160.91,70.54,429.61,357.31,48.96,90.19,65.94,52.58,27.57,85.46,74.68,52.08,53.93,145.91,42.25,-89.69,436.15,377.16,12.23,61.58,130.86,95.05,44.21,379.62,59.99,-85.19,387.69,387.63,109.65,72.89,136.82,69.12,-357.88,49.68,38.84,151.3,169.37,55.43,128.8,56.3,33.84,62.72,129.34,33.34,121.31,44.5,105.72,26.88,663.75,-581.57,314.71,64.94,125.7,72.63,179.37,128.42,422.79,-97.7,360.24,-584.27,-603.34,223.95,44.61,24.11,39.26,-530.96,54.21,151.25,79.83,103.66,157.43,183.16,183.53,98.41,179.63,40.42,79.96,196.76,11.12,74.51,193.49,336.7,169.04,86.85,184.81,104.45,-343.31,53.64,-592.53,87.16,275.63,88.75,104.71,89.9,259.35,-452.71,123.74,34.76,286.49,49.54,-15.02,43.12,296.83,66.99,66.91,30.29,282.85,14.99,151.25,140.69,-19.73,57.36,5.82,115.54,25.38,119.51,27.98,162.45,7.72,26.58,-3.46,-510.8,-203.92,-34.95,-36.04,2.62,-20.36,-35.02,-59.41,-89.9,-21.83,-94.29,-594.28,-649.8,-718.12,-662.94)
> cor.test(x, y, alternative = "two.sided", method = "spearman", exact=FALSE )
```

Spearman's rank correlation rho

```
data: x and y
S = 2337687, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
rho
-0.9510906
```

```
> # ---- 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:

-0.9693196 -0.9216745

sample estimates:

rho

-0.9510906

>