A simple example: the integers from 1 to 10 are

\[ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 10 \]

We can also emulate a simple calculator:

\[ \texttt{> 1 + 1} \]
\[ \texttt{[1] 2} \]
\[ \texttt{> 1 + pi} \]
\[ \texttt{[1] 4.141593} \]
\[ \texttt{> sin(pi/2)} \]
\[ \texttt{[1] 1} \]

Now we look at Gaussian data:

\[ 0.47518576 \ -0.46404870 \ -0.50394335 \ 0.80623107 \ -0.32276974 \ 1.76763085 \]
\[ -0.84170264 \ 0.47373779 \ -0.03374857 \ 1.13251147 \ 0.90894735 \ 0.35232711 \]
\[ 1.36923329 \ -2.67011349 \ 0.55914642 \ -0.04088619 \ -0.35273186 \ 0.49427165 \]
\[ -1.52218937 \ 1.82060297 \]

One Sample t-test

data: x

\[ t = 0.7005 \]  \[ df = 19 \]  \[ p-value = 0.4921 \]

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

\(-0.3386791 \ 0.6794483\)

sample estimates:

\[ \text{mean of x} \]
\[ 0.1703846 \]

Note that we can easily integrate some numbers into standard text: The third element of vector \( x \) is \(-0.50394353600776\), the \( p \)-value of the test is 0.49208.

Now we look at a summary of the famous \texttt{iris} data set, and we want to see the commands in the code chunks:

\[ \texttt{> data(iris)} \]
\[ \texttt{> summary(iris)} \]
<table>
<thead>
<tr>
<th>Sepal.Length</th>
<th>Sepal.Width</th>
<th>Petal.Length</th>
<th>Petal.Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>4.300</td>
<td>Min.</td>
<td>1.000</td>
</tr>
<tr>
<td>1st Qu.</td>
<td>5.100</td>
<td>1st Qu.</td>
<td>1.600</td>
</tr>
<tr>
<td>Median</td>
<td>5.800</td>
<td>Median</td>
<td>4.350</td>
</tr>
<tr>
<td>Mean</td>
<td>5.843</td>
<td>Mean</td>
<td>3.758</td>
</tr>
<tr>
<td>3rd Qu.</td>
<td>6.400</td>
<td>3rd Qu.</td>
<td>5.100</td>
</tr>
<tr>
<td>Max.</td>
<td>7.900</td>
<td>Max.</td>
<td>6.900</td>
</tr>
</tbody>
</table>

Species
- setosa : 50
- versicolor: 50
- virginica : 50