lapply and sapply

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lapply

Apply a function to each item in a list.

\[
my.list = \begin{bmatrix} 0 \\ 1 \end{bmatrix}, \begin{bmatrix} 9 \\ 10 \end{bmatrix}, \begin{bmatrix} -1 \\ 1 \end{bmatrix}
\]

\[
lapply(my.list, \text{mean}) = \begin{bmatrix} \text{mean}(\begin{bmatrix} 0 \\ 1 \end{bmatrix}), \text{mean}(\begin{bmatrix} 9 \\ 10 \end{bmatrix}), \text{mean}(\begin{bmatrix} -1 \\ 1 \end{bmatrix}) \end{bmatrix}
\]

\[
lapply(my.list, \text{mean}) = [[1, 9.5, 0]]
\]

Note: lapply will return a list object!

\[
\text{typeof(lapply(my.list, mean)) is list}
\]

sapply

Execute lapply, then if possible simplify by converting the output from a list to numeric vector.

\[
\]