Econ 294 Assignment 1

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Have a look at the last question before you start. It will

1. Load Data and verify it was loaded correctly.

- From CSV
- From Tab deliniated
- .xls Excel file
- From RData

length, dim, nrow, ncol, summary stats functions.

2. c function.

summary stats with NA and NULL values.

3. Matrix operations.

Create the following matrix and call it `x`.

$$
\begin{matrix}
1 & 2 & 3 \\
4 & 5 & 6 \\
7 & 8 & 9
\end{matrix}
$$

Show how to find it's transpose.

Find the eigenvalues and eigenvectors of `x`.

Now create the following matrix and call it `y`.

$$
\begin{matrix}
1 & 2 & 3 \\
3 & 2 & 1 \\
2 & 3 & 0
\end{matrix}
$$

Find the inverse of `y`.

Multiple `y` by its inverse. What is this new matrix called?

4. Create a data frame.

carat	cut	clarity	price
5	"fair"	"SI1"	850
2	"good"	"I1"	450
0.5	"very good"	"VI1"	450
1.5	"good"	"VS1"	NULL
5	"fair"	"IF"	750
NA	"Ideal"	"VVS2"	980
3	"fair"	"SI1"	420

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