

Lab1 Exercise: Basic R and EDA

Use an internal data set DNase. Learn about the data set using *help*.

```
> data(DNase)
> help(DNase)
```

- How many measurements are taken in each run?
- What is the maximum and minimum of optical densities?
- Make a histogram of optical density for all data
- Make a boxplot of optical density by “run”.
- compute the mean optical density for each run.
- make a scatter plot of the optical density against concentration
- make the same scatter plot except plotting the x axis in log scale
- For the same concentrations, density is measured twice. Do Run 2 and Run 3 agree with each other? Or does one run give higher measurements than another?

The following functions and examples may be useful:

```
hist, boxplot, tapply, mean, table, range, max, min, unlist, which
```

```
plot(1:100, 1:100, log="x")
plot(1:100, 1:100, log="y")
plot(1:100, 1:100, log="xy")
```