**Day 1 script**

**GETTING STARTED**

*Everyone open RStudio and create an R script*

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**BASICS**

Describe the panels

R is a calculator

Make variables

Assignment operator

Data types

Data structures

Vector sequence of data elements

Matrix

Dataframe

List

*Make a 5x10 matrix with values 1:50 in rows*

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**CONTROL STRUCTURES**

If

For

*Make a loop that prints and stores values divisible by 3*

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**DISTRIBUTIONS**

Distributions

rnorm random X

pnor probability of X

qnorm value with probability Y

*probability of observing temp of 38 when mn is 37 and sd is 0.5*

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**SIMULATION**

Calculate probability of having an undefeated beetle if you fight 10 beetles 6 times each

– use rbinom and for loop.

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**DATA IN/OUT**

Working directory

Reading and writing

Read a file from your desktop

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**PLOTTING**

Histogram - Gnatocerus

Bar plot – HairEyeColor[,,2]

Mosaic plot - HairEyeColor

XY scatter – gnatocerus

Box plot – iris$petal.length~iris$species

Strip chart – iris$petal.length~iris$species

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