Name _____

Lab 1 Assignment
(40 points)

DIRECTIONS
- ***Please upload this fillable pdf form to canvas. This form is due at the start of next Thursday class by 11:00 AM to Bioinformatics 104.***
- ***In a typed word processing document, clearly answer the following questions.***

A. Installation of R, bioconductor, and basic commands (10 points)

1) Describe the process of obtaining and installing R, Rstudio, and Bioconductor on a computer (what website to download, how to setup each) (2 pts).

   _____

   _____

2) How many rows does the multtest data have (2 pts)? _____

3) What is the mean of the multtest data (2 pts)? _____

4) What version of R do you have (2 pts)? _____

5) What is your current working directory (2 pts)? _____

B. R commands (30 points)

1) Generate a vector of numbers named "x" with 8 "4" and 10 "2" in succession, be sure to use the "rep" command (2 pts).

   _____

2) Add the number "20" to the end of the vector (2 pts).

   _____

3) Raise each element in the vector created in step 2 by the power of 2 (2 pts).

   _____

4) Generate a vector named "y" with your first and last name (2 pts).

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5) Insert your middle name into your name vector, if no middle name use "temp" as your middle name (2 pts).

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6) What is the difference between vectors and lists in R (2 pts).

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7) What is the command to quit R (2 pts)?

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8) How do you get help in R (2 pts)?

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9) What is the operator to take the square root of a number (2 pts)?

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10) What are two ways to generate sequential numbers of step size 1 (2 pts)?

_____

11) What is the default prompt for the R environment (2 pts)?

_____

12) If a command is not complete at the end of a line, R will give a different prompt. What is that prompt (2 pts)?

_____

13)   What would be the result of following R code (2 pts)?

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> x <- 1
> print(x)
```

_____

14) R creates and manipulates are known as objects. List 3 different classes of objects (2 pts)?

_____

15) How do you display the stored objects in R (2 pts)?

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