ACADGILD ASSIGNMENT 1.2

1. How many ways are there to call a function in R?

Answer: Functions are used to logically break our code into simpler parts which become easy to maintain and understand.

It's pretty straightforward to create your own function in R programming

Function Return Value

R Environment & Scope

R Recursive Function

R Switch Function

Syntax

```
func_name <- function (argument) {statement}
```

- Here, we can see that the reserved word function is used to declare a function in R.
- The statements within the curly braces form the body of the function. These braces are optional if the body contains only a single expression.
- Finally, this function object is given a name by assigning it to a variable, func_name.

Example of a Function

```
pow <- function(x, y) {

# function to print x raised to the power y
```

```
result <- x^y

Print(paste(x,"raised to the power", y, "is", result))

}
```

Here, we created a function called pow().

It takes two arguments, finds the first argument raised to the power of second argument and prints the result in appropriate format.

We have used a built-in function paste () which is used to concatenate strings

2. Is the below statement true?

The lazy evaluation of a function means, the argument is evaluated only if it is evaluated only if it is used inside the body of the function

Answer: True

Example:

In this example, the function f () has two arguments: a and b

```
> f <- function(a, b) {
+         a^2
+ }
> f(2)
[1] 4
```

This function never actually uses the argument b, so calling f(2) will not produce an error because the 2 gets positionally matched to a. This behavior can be good or bad. It's common to write a function that doesn't use an argument and not notice it simply because R never throws an error.

3. Mention true or false for below statements:

a. Insights driven from descriptive analytics is not meaningful.
Answer: False

b. The number of values in each Elements of a list, should be equal
Answer: False

c. The datasets are not stored in memory of the computer using R
Answer: True

d. Data frames and matrices are two dimensional however the array is multidimensional.
Answer: True