

# **Quiz 1: Impact Evaluation**

*Policy Applications with R*

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## **Question 1**

You have the following vector in R:

```
myList <- c("apple", "orange", "grape")
```

Write the R code required to access the element "grape".

## **Question 2**

Consider the following two lines of code:

```
myList <- c(10, 20, 30, 40)
myList2 <- ifelse(myList > 25, 1, 0)
```

What is the resulting value of myList2? Provide your answer in R vector format (e.g., `c(x, y, ...)`).

## **Question 3**

You define a vector of logical values as follows:

```
myList <- c(TRUE, FALSE, FALSE, TRUE)
```

What will be the output of the code `sum(myList)`?

## Question 4

You are working with a dataframe called `myDataFrame`. Running the `names()` function gives you the following column names:

```
> names(myDataFrame)
[1] "C1" "C2" "C3"
```

1. Provide the R code to check the total number of rows in `myDataFrame`.
2. Provide the R code to access the value located in the **second** row of column C3.
3. You want to create a new dataframe called `myDataFrame2` that only includes rows where the values in column C2 are positive ( $> 0$ ).

Your first attempt resulted in the following error:

```
> myDataFrame[myDataFrame$C2 > 0]
Error in '[.data.frame'(myDataFrame, myDataFrame$C2 > 0) :
  undefined columns selected
```

Rewrite the line of code below to fix this error.