SESSION 1: INTRODUCTION

Assignment 1

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1. Introduction

This assignment will help you understand the concepts learnt in the session.

2. Objective

This assignment will test your skills on the basics of Data Analytics.

3. Prerequisites

Not applicable.

4. Associated Data Files

Not applicable.

5. Problem Statement

1. **Please mention true or false for the below statements:**
   a) Prescriptive Analytics is used to predict the future outcomes: False
   b) Base R packages are installed automatically   : False

2. What is Recycling of elements in a vector?

Answer   : When applying an operation to two vectors that requires them to be the same length, R automatically recycles, or repeats, elements of the shorter one, until it is long enough to match the longer Vector.

3. Give an example of recycling of elements.

Answer   : Suppose we have two Vectors c(1,2,4) , c(6,0,9,10,13), where the first one is shorter with only 3 elements. Now if we sum these two, we will get a warning message as follows.

> c(1,2,4) + c(6,0,9,10,13)

[1] 7 2 13 11 15

Warning message:

In c(1, 2, 4) + c(6, 0, 9, 10, 13) : longer object length is not a multiple of shorter object length

Here R , Sum those Vectors by Recycling or repeating the elements in shorter one, until it is long enough to match the longer one as follows.

> c(1,2,4,1,2) + c(6,0,9,10,13)

[1] 7 2 13 11 15

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6. Expected Format

1. R file should be submitted where applicable.
2. R file should be in PDF or in .r format
3. Proper screenshots of the outputs should be submitted as well
4. The r codes, if submitted in any other format, will be subjected to deduction in marks

Note: Your solution will not be entertained if it is any other format, e.g., .zip, .doc, .rtf etc.

7. Approximate Time to Complete Task

20 mins.