



# Data Science

Programming In R

Assignment

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**Course:** Data Science – Technical  
**Module:** 1. Programming in R – I

**1. Say True or False for the below statements:**

- Prescriptive Analytics used to predict the future outcomes? **TRUE**
- Base R packages installed automatically? **FALSE**

**2. What is Recycling of elements in a vector?**

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.**

Given two vectors `c(1)` and `c(6,0,9,10,13)`. Summing them will cause R to recycle the elements of the shorter vector, in this case the element 1, by summing it to all the individual elements of `c(6,0,9,10,13)`

```
> c(1,1,1,1,1) + c(6,0,9,10,13)
[1] 7 1 10 11 14
```

Likewise summing a vector of two elements to a vector of 5 elements, R will recycle elements '1' and '2' summing them to vector `c(6,0,9,10,13)`.

```
> c(1,2,1,2,1) + c(6,0,9,10,13)
[1] 7 2 10 12 14
```