**SESSION -1 – INTRODUCTION**

**ASSIGNMENT – 1**

**1.Prescriptive Analytics used to predict future outcomes ?**

Ans. TRUE

Base R Packages installed Automatically ?

Ans. TRUE they are installed automatically , but not loaded automatically

**2.What is recycling of Elements in Vector ?**

Ans .

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

> c(1,2,4) + c(6,0,9,20,22)

[1] 7 2 13 21 24

The shorter vector was recycled, so the operation was taken to be as follows:

> c(1,2,4,1,2) + c(6,0,9,20,22)

So , we can conclude If two vectors are of unequal length, the shorter one will be recycled in order to match the longer vector

**3. Give an Example of recycling of elements**

Ans.

> u = c(10, 20, 30)   
> v = c(1, 2, 3, 4, 5, 6, 7, 8, 9)   
> u + v   
[1] 11 22 33 14 25 36 17 28 39