Assignments for session on “INTRODUCTION”

Assignment 1.1

1.1-> False.

The Predictive Analytics is typically used for predicting the future outcome. Having said that, prescriptive analytics does use the Predictive Techniques to recommend the probable outcomes for given set of input conditions.

1.2-> True.

The very basic packages are installed in R automatically. Later, we need to keep installing the required ones, on need basis.

2. Recycling of Vectors occurs when we try to perform the operation (say arithmetic) upon vectors with different length. In such cases, the shorter vector replicates(recycles) itself to match to higher sized vector and gives the outcome accordingly.

3. Here is an example of recycling of vectors while performing the SUM operation:

```
> c(2,8,4,10,6,9) + c(6,3)
[1]  8 11 10 13 12 12
```

The 2nd vector has recycled itself to c(6,3,6,3,6,3) so that it can perform the summation sequentially with each value of the 1st vector.

Assignment 1.2

1. Ans is **0 1 1**

2. Code to extract the contents from multiple excels into one df (I've called it "df_merged_files")

```
install.packages("xlsx")
library(xlsx)

#Merging for XLSX files

#1st step is to list the files in the target folder
setwd("C:/Users/sarang_dani/Desktop/R/Merge2/")
list_of_files <- list.files("C:/Users/sarang_dani/Desktop/R/Merge2/",pattern = "*.xlsx")
list_of_files

#2nd step is to keep binding them through a loop
#If it's the first iteration when the merged file is not yet generated,simply creat the one
for (each_file in list_of_files){
  if (!exists ("df_merged_files")){
    df_merged_files <- read.xlsx(each_file,1)
  }
  #After first iteration when the initial file is available, start merging the remaining ones
  if (exists ("df_merged_files")) {
    get_the_next_file <- read.xlsx(each_file,1)
    df_merged_files <- rbind(df_merged_files,get_the_next_file)
    rm(get_the_next_file)
  }
}
write.xlsx(df_merged_files,"C:/Users/sarang_dani/Desktop/R/Merge2/df_merged_files.xlsx")
```

3. Merging multiple ".CSV" files into one data frame (This time we use "read.csv")

```
#Merging for CSV files

#1st step is to list the files in the target folder
setwd("C:/Users/sarang_dani/Desktop/R/Merge/")
appended_list_of_files <- list.files("C:/Users/sarang_dani/Desktop/R/Merge/",pattern = "*.csv")
appended_list_of_files

#2nd step is to keep binding them through a loop
#If it's the first iteration when the merged file is not yet generated,simply creat the one
for (each_file in appended_list_of_files){
  if (!exists ("merged_file")){
    merged_file <- read.csv(each_file,header = TRUE,sep = " ")
  }
  #After first iteration when the initial file is available, start merging the remaining ones
  if (exists ("merged_file")) {
    new_file_to_be_appended <- read.csv(each_file,header = TRUE,sep = " ")
    merged_file <- rbind(merged_file,new_file_to_be_appended)
    rm(new_file_to_be_appended)
  }
}
write.csv(merged_file,"C:/Users/sarang_dani/Desktop/R/Merge/merged_file.csv")
```