

ASSSIGNMENT 4.2

Problem Statement

1. `x <- c('data.science.in.R','machine.learning.in.R')`

Perform the below string operation:

- Replace the period character "." within each string with another character i.e. "-" minus sign.

Answer: Use the `gsub()` function to replace the period character with each string of the vector 'x' with '-'

```
x <- c('data.science.in.R','machine.learning.in.R')
gsub(".", "-", x, fixed = T)
```

fixed = T is used due to regular expression(here it is '.')

Output:

```
> #Replace the period character "." within each string with another character i.e. "-" minus sign.
> x <- c('data.science.in.R','machine.learning.in.R')
> x
[1] "data.science.in.R"      "machine.learning.in.R"
> gsub(".", "-", x, fixed = T)
[1] "data-science-in-R"      "machine-learning-in-R"
>
```

2. `x <- c('data.science.in.R','machine.learning.in.R')`

Perform the below String operation:

- Append again with "-" minus sign character at the start of each string and finally concatenate all the string within the vector to form a final single string and assigning it to some object

Answer: Using the for loop on the 'x' vector and using the paste function to append the "-" at the start and concatenating the strings using `sep=""`

```
x <- c('data.science.in.R','machine.learning.in.R')
x
strVal<- ""
for(i in 1:length(x)){
  strVal<- paste(as.character(strVal), "-",
                as.character(x[i]), sep="")
}
strVal
```

Output:

```
> x
[1] "data.science.in.R"      "machine.learning.in.R"
> strVal<- ""
> strVal
[1] ""
> for(i in 1:length(x)){
+   strVal<- paste(as.character(strVal), "-",
+                 as.character(x[i]), sep="")
+ }
> strVal
[1] "-data.science.in.R-machine.learning.in.R"
> |
```