



ACADGILD

SESSION 4: FOUNDATIONAL R PROGRAMMING-II

Assignment 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.

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

SOLUTION :

1. The R-script for the given problem is as follows:

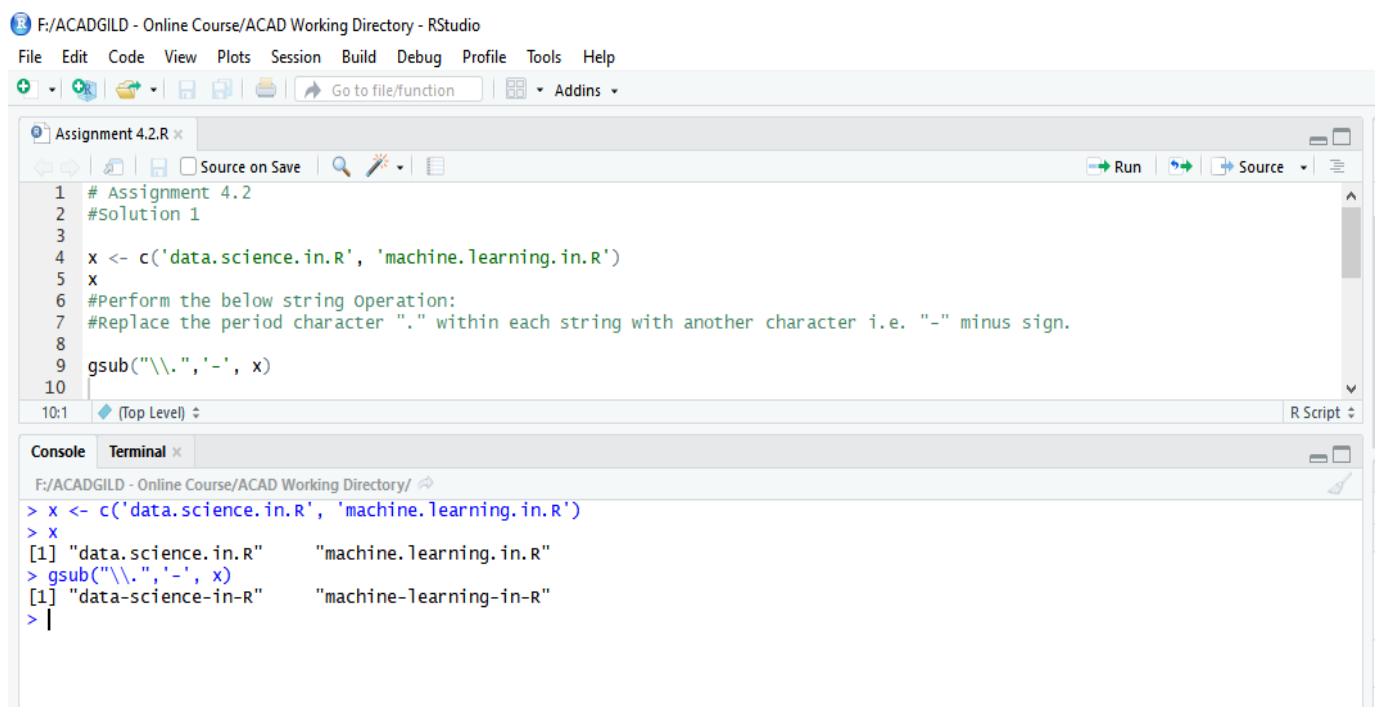
```
x <- c('data.science.in.R', 'machine.learning.in.R')
```

```
x
```

```
gsub("\\.", '-', x)
```

- `gsub()` perform replacement of the first and all matches respectively.
- Here `gsub()` replaces "." With "-" sign

The output of the R-Script (from Console window) is given as follows:



The screenshot shows the RStudio interface. The script editor contains the following code:

```
1 # Assignment 4.2
2 #Solution 1
3
4 x <- c('data.science.in.R', 'machine.learning.in.R')
5 x
6 #Perform the below string operation:
7 #Replace the period character "." within each string with another character i.e. "-" minus sign.
8
9 gsub("\\.", '-', x)
10
```

The console window shows the output of the script:

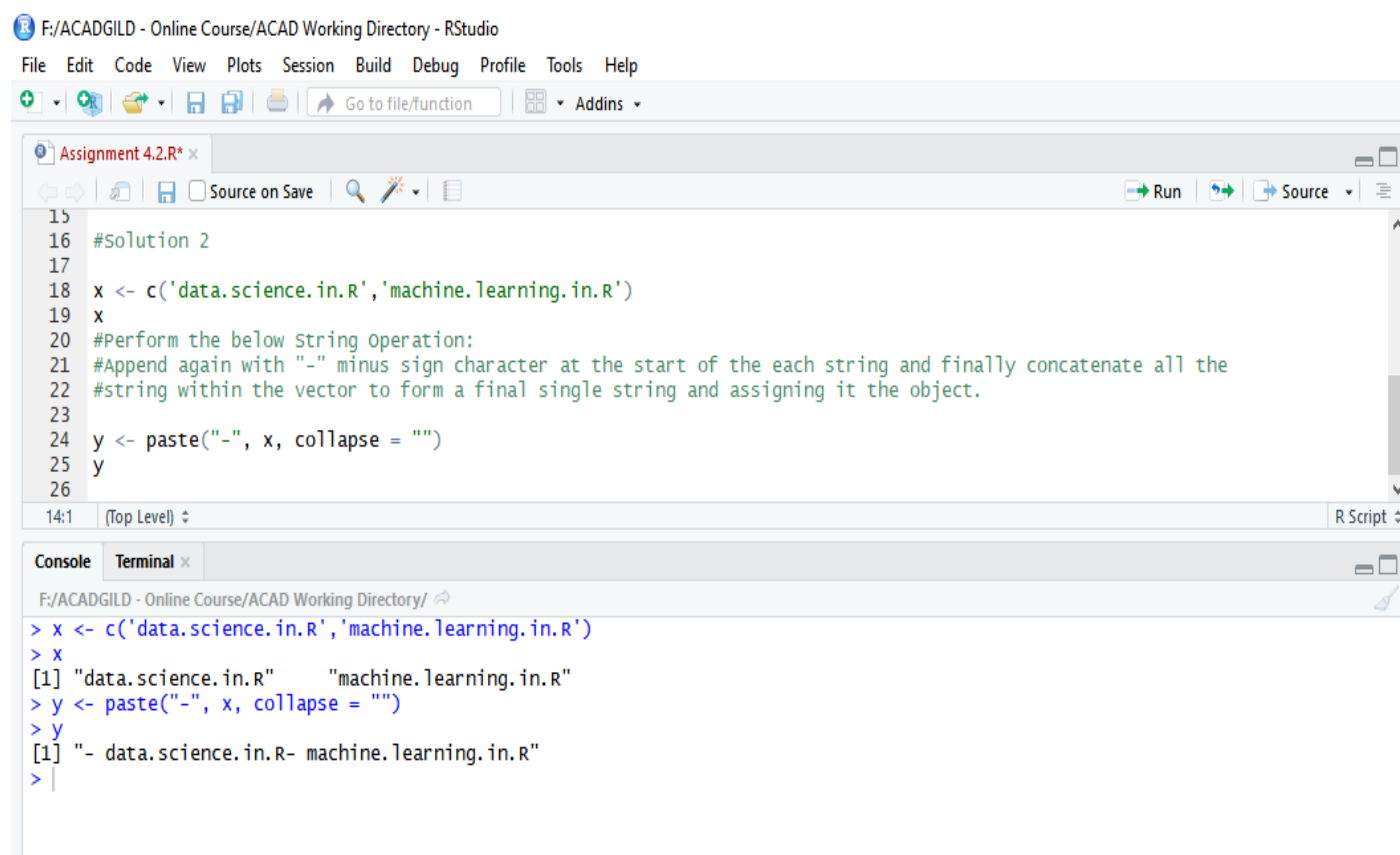
```
> x <- c('data.science.in.R', 'machine.learning.in.R')
> x
[1] "data.science.in.R"      "machine.learning.in.R"
> gsub("\\.", '-', x)
[1] "data-science-in-R"      "machine-learning-in-R"
> |
```

2. The R-script for the given problem is as follows:

```
x <- c('data.science.in.R','machine.learning.in.R')
x
y <- paste("-", x, collapse = "")
y
```

- paste() function concatenates vectors after converting to character.
- Here, paste() Appends with "-" minus sign character at the start of each string and finally concatenates all the string within the vector to form a final single string and assigning it to object named “y”

The output of the R-Script (from Console window) is given as follows:



The screenshot displays the RStudio interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, and Help. The toolbar contains icons for file operations and a 'Go to file/function' search bar. The main editor window, titled 'Assignment 4.2.R', shows the following R script:

```
15
16 #Solution 2
17
18 x <- c('data.science.in.R','machine.learning.in.R')
19 x
20 #Perform the below String operation:
21 #Append again with "-" minus sign character at the start of the each string and finally concatenate all the
22 #string within the vector to form a final single string and assigning it the object.
23
24 y <- paste("-", x, collapse = "")
25 y
26
```

The console window at the bottom shows the execution output:

```
> x <- c('data.science.in.R','machine.learning.in.R')
> x
[1] "data.science.in.R"      "machine.learning.in.R"
> y <- paste("-", x, collapse = "")
> y
[1] "- data.science.in.R- machine.learning.in.R"
>
```