R Program to Find the Factors of a Number

In this example, you'll learn to find all factors of an number (entered by the user) using for loop and if statement.

To understand this example, you should have the knowledge of following R programming topics:

- R Functions
- R for Loop

Example: Find factors of a number

```
print_factors <- function(x) {
print(paste("The factors of",x,"are:"))
for(i in 1:x) {
if((x %% i) == 0) {
print(i)
}
}
}
```

Output

```
> print_factors(120)
[1] "The factors of 120 are:"
[1] 1
[1] 2
[1] 3
[1] 4
[1] 5
[1] 6
[1] 8
[1] 10
[1] 12
[1] 15
[1] 20
[1] 24
[1] 30
[1] 40
[1] 60
[1] 120
```

In this program we take a number and display its factors using the function `print_factors()`.

In the function, we use a `for` loop to iterate from 1 to that number and only print it if, it perfectly divides our number. Here, `print_factors()` is a user-defined function.