

WQD7004 Programming for Data Science

Lab 1 Getting to know R

1. Installation of R (<https://cran.rstudio.com/>) and RStudio (<https://www.rstudio.com/products/rstudio/download/>)
2. Create a vector named **num** with four elements (2, 0, 4, 6).
 - a. Display the third element of the vector.
 - b. Display the all elements of the vector except first element.
 - c. Count the number of elements in the vector.
3. Create a vector named **q3** that add two numbers 3 and 5. After that, add 100 to this vector and display the output.
4. Create a vector named **animal** that consists of cat, tiger, lion and elephant. Display the vector. After that, append monkey and cow to the vector and display the output.
5. Create two vectors named **n1** and **n2** of integers type (any number) and of length 3. Then, add and multiply the two vectors.
6. Create a vector **x** of size 4 with any value from 1-10.
 - a. Display the sum, mean, minimum and the maximum of the vector **x**.
 - b. Append 3 values (11-20) to the vector **x** created. Display the sum, mean, minimum and the maximum of the vector.
 - c. Display the first two values and last two values of vector **x**.
 - d. Assign the vector **x** in ascending order to s1, descending order to s2 and reverse order to s3.
 - e. Display the second highest value in vector **x**.

*mean in two decimal places.

7. Create an R file named **total.r** that get two integer input from user. Display the total of the input. Run the r file using terminal. Example output:

```
Enter two number :  
12  
23  
[1] "12 + 23 = 35"
```