EXERCISES SESSION #02

BASIC OPERATIONS

1. Create a vector x containing the elements 0,1,2,3,4,5,6. HINT: c()
2. Write an if-else statement to check the first element of x. If it is zero, output “This is good”, else output “This is bad”. HINT: print() and logical operator ==
3. Write a for-loop that iterates over each element of vector x using print()
4. Write a for-loop that iterates over each element of vector x and print the cube of each value. HINT: 2^3 is to produce the cube of 2, 8
5. Write a for-loop that makes a right angle triangle pattern where each row is a number x repeating itself x times. HINT: rep()

The pattern is:

1

22

333

4444

1. Write a for-loop that iterates over the inbuilt iris dataset that evaluates the number of characters in the column name. The output should be like: Sepal.Length (12). HINT: paste0() and nchar()
2. Write a for-loop that iterates over the inbuilt iris dataset ad outputs for each flower/row as output: Flower 1 is a setosa and has a Sepal.Length of 5.1
3. Write a for-loop that iterates over each element of vector y and only outputs the positive numbers, i.e. ignoring the negative numbers. HINT: next()
4. Write a for-loop that iterates over each element of vector y, till it reaches value 10. If it reaches value 10, stop the for-loop. HINT: break()
5. Use the inbuilt rivers dataset and write a for-loop that checks each value. If the value is lower than 500, output “short river”. If the river is more than 2000, output “long river”. Everything else, output the original value.

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