

Exercises part1

Basic Expressions

1. Perform addition: $5 + 3$.
2. Perform multiplication: $4 * 6$.
3. Perform division: $20 / 4$.
4. Calculate the remainder: $15 \% 4$.
5. Calculate the integer division: $15 \%/ 4$.
6. Calculate an exponent: 3^2 .
7. Combine operations: $2 + 3 * 4 - 1$.
8. Compare values: $7 > 5$.
9. Check equality: $9 == 9$.
10. Check inequality: $10 != 3$.
11. Combine comparisons: $(5 > 2) \& (7 < 10)$.
12. Combine comparisons: $(4 > 6) | (8 == 8)$.

Function Calls

1. Call the `sqrt()` function for 25.
2. Call the `log()` function for 100.
3. Call the `exp()` function for 2.

4. Call the `round()` function for 3.14159 to 2 decimal places.
5. Generate 10 random numbers: `runif(10, min = 0, max = 1)`.
6. Repeat the string "Rocks!" 3 times: `rep("Rocks!", 3)`.

Variable Assignment

1. Assign a value to a variable: `x <- 10`.
2. Print the value of `x`.
3. Assign the result of `5 + 3` to `y`.
4. Assign a string to a variable: `name <- "R is fun"`.
5. Assign a logical value: `flag <- TRUE`.
6. Change the value of `x` to 20.
7. Assign the result of `sqrt(16)` to `z`.
8. Create a new variable: `a <- x + y`.
9. Print the value of `a`.
10. Assign a sequence of numbers: `seq <- 1:10`.
11. Assign repeated values: `repeated <- rep(5, times = 3)`.
12. Assign a logical vector: `logic <- c(TRUE, FALSE, TRUE)`.