Worksheet 4B

Bea Joyce C. Baylon

2024-10-30

#USING LOOP FUNCTION

1. Using the for loop, create an R script that will display a 5x5 matrix as shown in Figure 1. It must contain vectorA = [1,2,3,4,5] and a 5 x 5 zero matrix.

```r
vectorA <- c(1, 2, 3, 4, 5)

matrix5x5 <- matrix(0, nrow = 5, ncol = 5)

for (i in 1:5) {
  matrix5x5[i, ] <- vectorA
}

print(matrix5x5)
```

```
##      [,1] [,2] [,3] [,4] [,5]
## [1,]    1    2    3    4    5
## [2,]    1    2    3    4    5
## [3,]    1    2    3    4    5
## [4,]    1    2    3    4    5
## [5,]    1    2    3    4    5
```

2.Print the string "*" using for() function.

```r
# Define the dimensions of the grid
rows <- 5
columns <- 5

# Outer loop for rows
for (i in 1:rows) {
  # Inner loop for columns
  for (j in 1:columns) {
    cat("* ")
  }
  # Newline after each row
  cat("\n")
}
```

```
## * * * * *
```

```
## * * * * *
## * * * * *
## * * * * *
## * * * * *
```