## $RWorksheet\_Calambro \#4b$

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

```
vectorA <- c(1, 2, 3, 4, 5)
matrixA <- matrix(0, nrow = 5, ncol = 5)

for (i in 1:5) {
   for (j in 1:5) {
     matrixA[i, j] <- vectorA[abs(i - j) + 1]
   }
}
print(matrixA)</pre>
```

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