

Q2.1)

Code segment below is an implementation of the matrix multiplication algorithm.

Cited from:

Kittitornkun, S., & Hu, Y. H. (2001). Efficient implementation of nested-loop multimedia algorithms. *EURASIP Journal on Advances in Signal Processing*, 2001(3), 269324.

*Listing 1. Matrix-matrix multiplication multiple times*

```
Do  $i = 1$  to 3  
  Do  $j = 1$  to 3  
     $c[i, j] = 0$   
    Do  $k = 1$  to 3  
       $c[i, j] = c[i, j] + a[i, k] \times b[k, j]$   
    EndDo  $k$   
  EndDo  $j$   
EndDo  $i$ 
```